PENNSYLVANIA GAME NEWS

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LEADERSHIP

THE Game Commission and the sportsmen felt greatly honored the other day when they learned that Ross L. Leffler was selected by the Allegheny County Commissioners to head that County's Council of Defense.

His selection marked one of the biggest and most important assignments ever given a member of the Commission, and we are proud indeed that our president should be so signally honored. It speaks well of the ability, courage and resourcefulness of one who already has so many irons in the fire, to be able to meet the requirements of such an added responsibility. Allegheny is the second largest county in the Commonwealth and that, together with its large industrial plants, makes defense organization not only exceedingly important but very difficult and complex. Anyone who knows anything about organization realizes what a gigantic task confronts him

ROSS L. LEFFLER

The "Pittsburgh Press" in commenting on his selection commended him for his keen sense of public relations and his reputation for leadership. It emphasized the fact that he is industrious, conscientious, personable, an experienced organizer, two-fisted enough to get action, sufficiently susceptible to good advice to be cooperative — and that he is neither a stuffed shirt know-it-all nor a gullible milksop

Mr. Leffler's appointment as a National Defense organizer typifies the manner in which other members of the Commission have been "enlisted" for greater and more important service. Down through the years one after another of them have been placed, because of their ability and leadership, in tremendously responsible public service positions—always, like their work for the sportsmen, on a volunteer basis.

We should indeed be proud that we are a part of the organization from which have been chosen leaders in past and in present day crises, and we should do all we can individually and collectively to insure the success of Mr. Leffler's important mission.—The Editor.

LET'S ALL HELP FEED WILDLIFE THIS WINTER

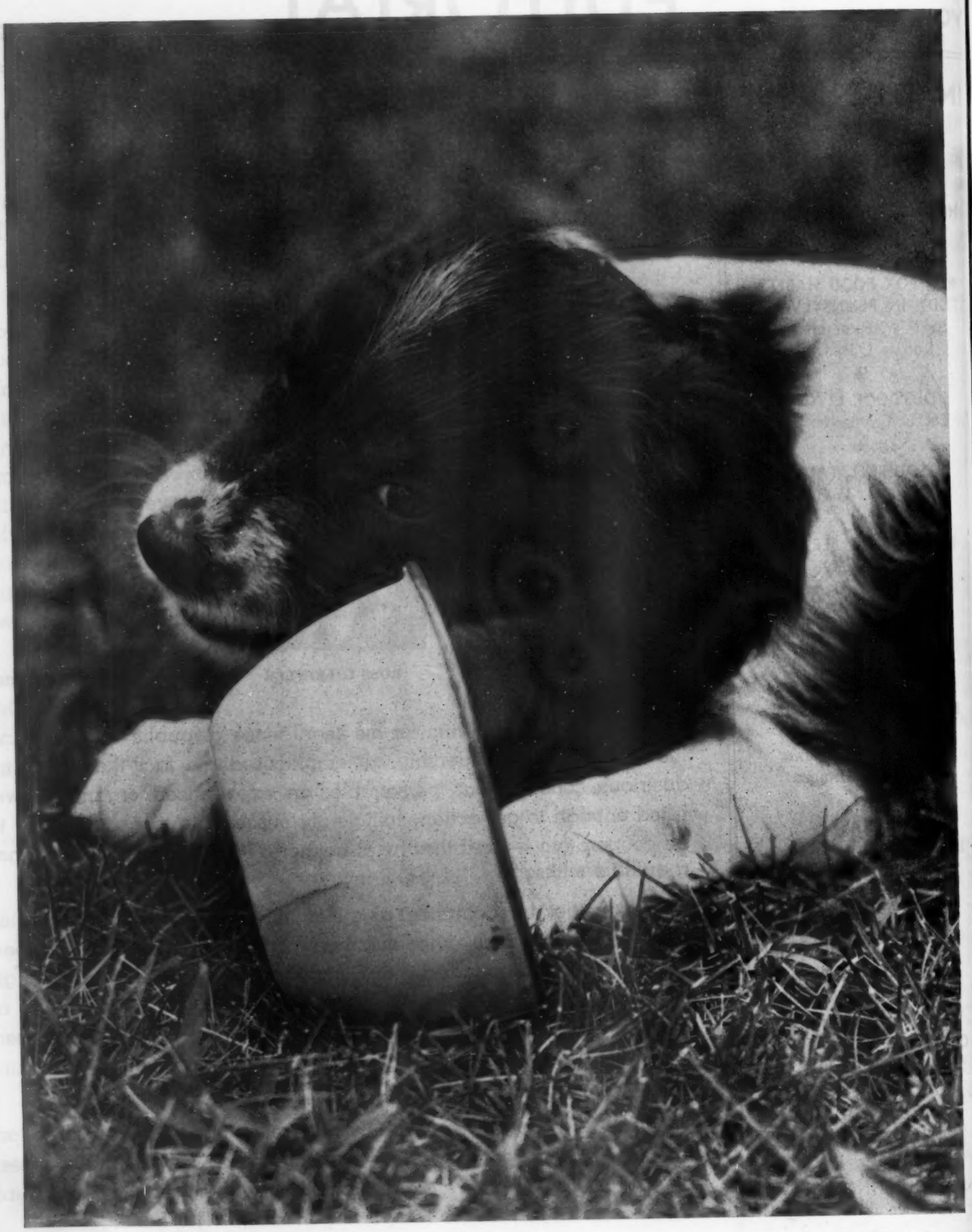


Photo by W. L. R. Drake

SPILLED MILK

SAFER SHOOTING

Editor's Note: The following editorial which appeared in the October 1941 issue of the American Rifleman is full of a lot of good sense. Take time to read and assimilate it.

AS reported by the National Safety Council, accidents caused over a hundred thousand deaths in the United States last year. Motor vehicles were responsible for 34½% of these deaths. Falls—off stepladders, in slippery bathtubs, down stairways, etc.—accounted for another 25½%. Eight percent of accidental deaths were due to burns, 6½% to drownings, 5% to railway accidents of various kinds, and 3½% to leaving the gas jet open or to taking the wrong bottle out of the family medicine chest in the dark. **Firearms accidents were responsible for less than 2½% of the accidental deaths.** The remaining deaths were caused by a variety of accidents grouped under the heading "all other causes."

These figures will come as a surprise to a great many people. The average newspaper reader has the firm conviction that, next to motor vehicles, firearms are the most prevalent cause of accidental deaths. As target shooters, we have long been able to point to our sport as the safest in the entire American sports picture. Now come these figures from an unbiased source to reveal the fact that firearms, even in the hunting field and in the hands of improperly trained youngsters plinking and playing with guns in the home, are a very **minor** factor in the accident picture in this country.

Training Begins With Juniors

But as shooters we cannot afford to take a self-satisfied viewpoint based on these accident figures. Even though the automobile is seventeen times as deadly as the gun, even though slippery bathtubs and rickety stepladders are ten times as deadly as guns, even though the record of **target shooting** is almost unspotted with firearms accidents, the fact remains that 2400 men, women and children were accidentally killed with firearms in the United States during 1940. **Every one of those accidental shootings received far more space in the newspapers than did other accidental deaths occurring in the same neighborhood.** Each of these 2400 deaths represented one family and one neighborhood where in the future mothers will be afraid of firearms and will warn others against the "dangers" of owning a gun. So, instead of being smugly satisfied with the comparative accident figures, it is urgently necessary that we as shooters do everything in our power, first, to make known to the public the true comparative figures, second, to take every possible step to still further reduce gun accidents.

To help us decide just what to do, we can break down the gun accident figures and discover some further interesting facts. The first thing we note is that **slightly more than half the gun accidents occurred in homes!** There were **more** accidental gun fatalities in **homes** than there were **out** of **doors!** Another interesting point is the fact that guns accounted for 8% of **farm** home accident fatalities and only about 3% of the accident fatalities in **city** homes. Finally, we discover that 25% of all accidental deaths due to firearms **involved youngsters eighteen years of age or younger and another 25% fall within the nineteen to twenty-four year age group.**

These figures point clearly to one conclusion. The education of the **youth** of our nation in the safe handling of firearms **is the most important single factor in any program designed to effect an immediate and drastic reduction in the number of firearms accidents.** The second lesson to be drawn from these figures is the fact that the farmer and his family need education in the safe handling of firearms just as badly as the city man and his son need similar education.

Shotgun Worst Offender

Other facts also will prove surprising to most people. One such fact is that approximately 80% of all gun shot accidents in the hunting field are caused by **shotguns.** The much feared high power rifle is a comparatively minor offender. Another important point is the fact that approximately 70% of all gun shot wounds in the hunting field **are self-inflicted.**

From these supplementary figures we may draw the conclusion, first, that the shotgun shooter needs safety training in much larger doses than it has been so far fed to him. Second, that legislation ruling the high powered rifle out of the hunting field is one of the least needed and least effective means of reducing hunting accidents.

Out of this summary appears clearly the part which target clubs can play in reducing firearms accidents in the home and in the field. The tremendous importance of the organization and proper training of Junior Rifle Clubs becomes immediately evident. No further proof of the value of the training afforded by such Junior Clubs is needed than the fact that although 25% of all fatal firearms accidents involved children of eighteen years of age or younger, the entire nation-wide Junior Rifle Club program of the National Rifle Association is conducted year after year **without an accident of any kind.** No Junior Rifle Club member was involved in that 25% of the total gun accidents during 1940! Proper training of young men in the eighteen to twenty-four year age group would eliminate another 25% of our shooting accidents. These are men of the age who, with the proper approach, can most easily be "sold" on the idea of affiliating with a local rifle and pistol club.

Here, then, is a safety program, simple and practical, which promises without the aid of any other factor **to eliminate one-half of the annual shooting accidents.**

Education, Not Legislation

In our efforts toward gun safety we have not been governed enough by analysis of cold figures. Those figures show the need not of legislation but of **education.** Those same figures show that the education needs to start where the National Rifle Association has so earnestly endeavored to work—in the junior field. In local high schools, Y. M. C. A.'s, Boy Scout Troops, Junior veterans' groups and Junior arm groups lie the opportunity to accomplish a firearms safety mission which will produce immediate, tangible and material results.

Sponsor a Junior Rifle Club not merely because it will provide a source of fine recruits for the senior club, not merely because you will derive more pleasure from the first medal won by your protege than you have ever derived from winning a match for yourself, but more particularly **because the shooters of America owe it to themselves and to the shooting game to eliminate shooting accidents**—and the Junior Rifle Club is the most important single factor in the accomplishment of that great public service.—C. B. L.—Reprinted from Oct. 1941 issue of the American Rifleman.

Pennsylvania Accidents Reduced

The Pennsylvania Game Commission praised the hunters of the Commonwealth at its annual meeting January 8 for their cooperation in reducing the hunting accidents during the recent season.

Even though as many licenses were sold as the year previous and hunters generally were prone to be more hurried in their short trips afield, preliminary figures indicate that 16 less lives were lost than during the preceding year, and 50 less persons were injured by gunfire.

During the 1941 season preliminary calculations indicate there were 27 fatal and 369 non-fatal accidents, as against 43 fatal and 419 non-fatal accidents during 1940. In 1941 there were 21 small game hunting fatalities (including 3 pre-season deaths) as compared with 25 in 1940. The small game season non-fatal accidents numbered 9 less than the previous year, namely, 342 as against 351.

The riflemen turned in a much better record than the shotgun shooters. During the recent season there were only 6 known deer hunting fatalities, with none during the bear season, as against 18 during the 1940 deer season. Big game non-fatalities also dropped from 68 in 1940 to 27 in 1941.

In commenting on the preliminary report, the Commission said it proves conclusively that its Safety Educational Campaign, in which the sportsmen's organizations are playing an increasingly important part each year, is having its effect, and the percentage of Pennsylvania's hunters wearing plenty of bright red while afield is growing rapidly.

HOUNDS OF THE RIDGE

Ned walked into our barn one day and with his usual nonchalance sat down on a pile of straw.

JIM came stomping in from the outside. Before he closed the door a blast of cold air spanked briskly against my face. Jim's cheeks were aflame with the tingle of the air. We were alone, Jim and I. We were waiting for November's early darkness to come drifting across the countryside. Jim lived alone and liked it—alone as far as constant human companionship was concerned. But Jim was never really alone. There was always a hound, even as now, curled up in front of the kitchen stove. And most times during 'coon season, just as now, someone paid Jim a visit.

"It'll be colder'n ice," Jim muttered as he rammed the stove full to the lids with oak wood.

He nudged the hound with his foot and the dog's eyes rolled in their sockets and stared up at him. The tail thumped heavily once or twice then he settled again.

"That's a lazy hound, Jim."

Jim laughed. "Lazy? Lazy? That hound's the runningest thing that ever hit the woods beyond the ridge."

"When'd you get him, Jim?"

Jim eased himself down into an old rocker, shifted around a few seconds, then settled comfortably. "Let's see, been . . . yes, 'bout three months ago. The skinniest bunch uh fur and bones you ever saw."

"Not skinny now."

"By gosh no hound of mine's ever been skinny!"

I smiled. "Of course not, Jim."

We were both silent for a few minutes. Jim puffing contentedly on his crusty corncob, I merely meditating, seeing things in the puffs of smoke curling upward from Jim's pipe.

"It's been a long time," I said, as though talking to myself. "Yes, a long time since I've hunted with you, Jim. I remember when we used to work together in the fields. Corn cutting time, too. And the pumpkins sparkling with frost. You know, Jim, this morning when I went outside with you and watched you working around the barn, I felt as though I had never been away. There's no smell quite like that of a crib crammed full of corn, nor like that horsey and hay smell of a barn."

"No it ain't, and there ain't no music in that city of yourn' like a hound dog runnin' in the night, either. 'Specially when a dog gets over beyond the ridge."

"The ridge still covered with those big beeches—the ones that look like silver in the moonlight?"

"Ain't never cut a-one of them, don't intend to."

The hound got up and stretched, walked over to the door and sniffed loudly.

"He wants out, Jim."

"Naw, jest curious. Gettin' restless. Knows darn well we're gonna let him run tonight, dont' you, Burr."

"Where'd you get that name for a hound, Jim? Burr . . .," I laughed, "that's the prize name of all I've ever heard tagged on a hound dog."

"It's the name he knew when I bought him. To change it would be like throwin' away an old shoe for a new one—tight and squeaky and just don't work right."

The door opened and the old man was outlined clearly—a dog beside him.

"I suppose so."

Jim got up. "Might just as well get something hot in us before we set out." He walked over to the window. "Shadows're settin' down over the fields now."

I got up and went over beside him. The shadows were falling. Evening shadows—November twilight. I could just make out the tops of a few lonesome corn shocks that Jim always let stand as cover for quail.

Jim was fussing about the stove. I could feel my nose wrinkle with the savory fragrance of strong coffee. Grease sputtered in the frying pan. Burr whined eagerly and trotted up and down the kitchen, finally slumped down by the stove again.

"No use makin' a lot of extras, Jim."

"No extras, jus left overs. Few spuds, some chicken to be heated up, canned tomatoes. Just a little something."

After awhile I turned away from the window. The darkness of night was tight laced over the softly swelling hills and over the tops of the great beech trees that lined the ridge cutting through the center of the acre after acre of wooded country to the north of Jim's farm.

We ate silently. Jim never liked to talk while eating. Just chewed, swallowed and repeated. And he could eat! The hound watched us from his place in front of the stove.

When we were finished I shoved the chair back and stood up. "Ready Jim? We can clean up when we come back."

Jim shook his head. "Nope, I'll clean up first. Only take a few minutes."

I helped him, a tight nervousness making me walk back and forth as I dried the dishes.

"You're plenty anxious," Jim said as he wiggled into a heavy coat.

"Yes," I replied as I checked up on my flash-lantern.

Burr got up, shook himself vigorously, wrinkled his nose as he sniffed at my boots, then ran to the door and scratched at it, his whines sharp little sounds of anxiety.

Jim laughed and let him out. We followed, the cold air chilling my face and flame-sharp in my lungs. After a few moments, though, I didn't mind the cold. Jim walked fast, his lantern swinging easily. There was a fresh spring in my legs, as though hard city pavements were long years behind me. Burr swept out of sight, and we trudged along, with me stumbling now and then over corn stubbles. There was no moon, no clear break in the darkness—nothing except the dull yellow parchment glow of Jim's lantern.

"When we get to the woods, we can make a fire," Jim said.

"I'm not cold," I mumbled.

Jim chuckled.

"I'm not," I reassured.

He chuckled again. "Maybe not, but you will be."

"Not if that hound gets to singing."

"He will."

"He better."

We were listening to chimes and organ music only it was running hounds that were voicing the sounds.

By EDWIN J. BECKER

(Contributor to: American, Country Home, Country Life, The Spur, Outdoorsman, Sports Afield, Outdoor America, American Field, etc.)

★

"Never misses," Jim boasted proudly.

"We'll see, there's a first time for everything."

"He'll sing over beyond the ridge and when we get there that old ridge runner will have a 'coon up a tree. Chase 'em over beyond the ridge everytime."

We were in the woods now, walking slowly, mindful of windfalls, of clumps of dogwood, of bushes Now and then my legs tangled in clumps of laurel. Once I sprawled out full length conscious of a ripping sound as I fell. When I got up Jim took a look at my pants. But he didn't have to look—I could feel the cold air against my backside.

"Jes like a kid that rips his breeches," Jim jeered.

I laughed heartily.

We stopped in a clearing where once a saw mill had thinned out some of the big timber.

"Here's a spot for a fire," Jim suggested.

Minutes later we were warming our hands over the flames. Burr was nowhere in sight. I strained my ears to catch a sound of him moving around in the brush, but there were no sounds.

"He's noseyin' around somewhere," Jim said.

"I hope he soon strikes a hot trail," I answered as I stepped closer to the fire. "This is the coldest weather for this time of the year I've ever met up with down here."

"Seasons been fu . . .," he started but stopped. We both stopped breathing for a second.

I nodded.

"Yep," Jim explained, "that's him."

I forgot about the cold, forgot how the heat from the fire was hot against my legs, forgot everything so intense was the enchantment of that bugle peal in the night. But no, Burr's hound notes weren't the bugle sounds I thought they were. They were something more rumbling—like the deep bass notes of an organ. They came to our ears out of the night in one steady swelling sound.

They slipped into the woods and we turned and ran.

"He's 'way off," Jim whispered.

I wondered why he whispered; wondered why I remained silent not wanting to hear anything except the bass notes of Burr drifting to our ears.

"But he's drivin' close," Jim said and his voice was full of pride.

I could speak now. The first moments of hearing a hound open on hot scent were over. From now until the tirade of "tree" burst upon the night, Jim and me could talk as Burr drove the 'coon closer.

"Over beyond the ice pond now," Jim advised.

I thought a moment. "Goodness, Jim, that's nearly a mile west from here."

"Yep."

"How'd he get over there."

"Burr just goes out and looks over the country till he strikes trail. Sometimes he's so darn far 'way when he strikes you can hardly hear him."

'Where'd you buy him?"

He didn't answer for a moment. Burr was close now and the woods seemed filled with his churtling rumble of hound voice.

Bits of fire stared down at us.

"Shipped up from Tennessee." Jim answered. "He's hit the west end of the ridge. Now we'll see."

"See what?"

"Don't it strike you funny that none of the 'coons Burr's ever treed has went up one of them ridge beeches?"

I pondered a moment. "You mean he's managed to force the 'coon—every one of 'em—off the ridge and up a more climable tree like one of those old black oaks?"

"Every time."

The hound was close now and the woods was filled with the sound of his coming. "Come on," Jim said as he stomped out the fire and kicked dirt over it.

"Where to?"

"The ridge! Come on!"

He ran and I followed. Jim's lantern went out. He swore good naturedly. I fumbled for the flash-lantern dangling from my belt. Smack! I stumbled back and felt my cheek.

"Get that darn light on!" Jim yelled.

Jim didn't wait to let me examine my scraped cheek. "Ain't nothing," he said. "Come on, we'll make the ridge."

For fifteen - twenty - thirty minutes, Ned called.

The light was strong and the beam pushed out ahead of us in a glaring flood of brilliance. We scrambled up the side of the ridge and stopped.

Burr was driving hard—coming directly at us. The beeches were ghastly in the white glare of our light—like some cold, silver pillars stretching away into jet blackness, into the maw of night.

Then it happened. Burr was off the ridge and driving down through the oaks. "Surely," I thought, "that 'coon should have treed here on the ridge. With him caught between us and the dog he should have taken to one of the beeches."

"What I tell you," Jim boasted, "he's a 'coon hound. Never makes me climb a slick-barked beech."

I looked at one of the huge trees It was smooth and big around. There was no climbing it without irons.

Then hell broke loose. All the 'coon hounds that ran through all the years in this wide sprawl of woods seemed to have suddenly squatted on their haunches around a tree and lifted their muzzles skyward. Gee! No one dog could make that much music in the night. Burr's singing of "treed" was a chorus of sound rising from a pit. So loud, so clear, so melody laden it smote against your ear drums with a resonance that threatened to split them.

"Treed, by gosh!" Jim was elated and was off toward the clamor of Burr's victory notes.

We didn't run, we took our time. And all the while Burr continued his serenade. I fancied that little ringtail squeezed flat in a crotch. What was he thinking?

We found Burr set back on his haunches his muzzle pointed at the dark filagree of the oak. How he sung! How he blasted the night with sound.

"The light," Jim said.

I tilted the beam upward. It moved slowly over the gaunt, leafless limbs. Then I hesitated, steadied the beam. Two yellow-green eyes glared down at us. "There he is," I said.

Burr seemed to go crazy and leaped and bit at the tree, all the time singing away, unmindful of our presence.

"I don't want him," Jim said.

"You're not going up," I asked, perplexed.

"Nope."

(Continued on Page 26)

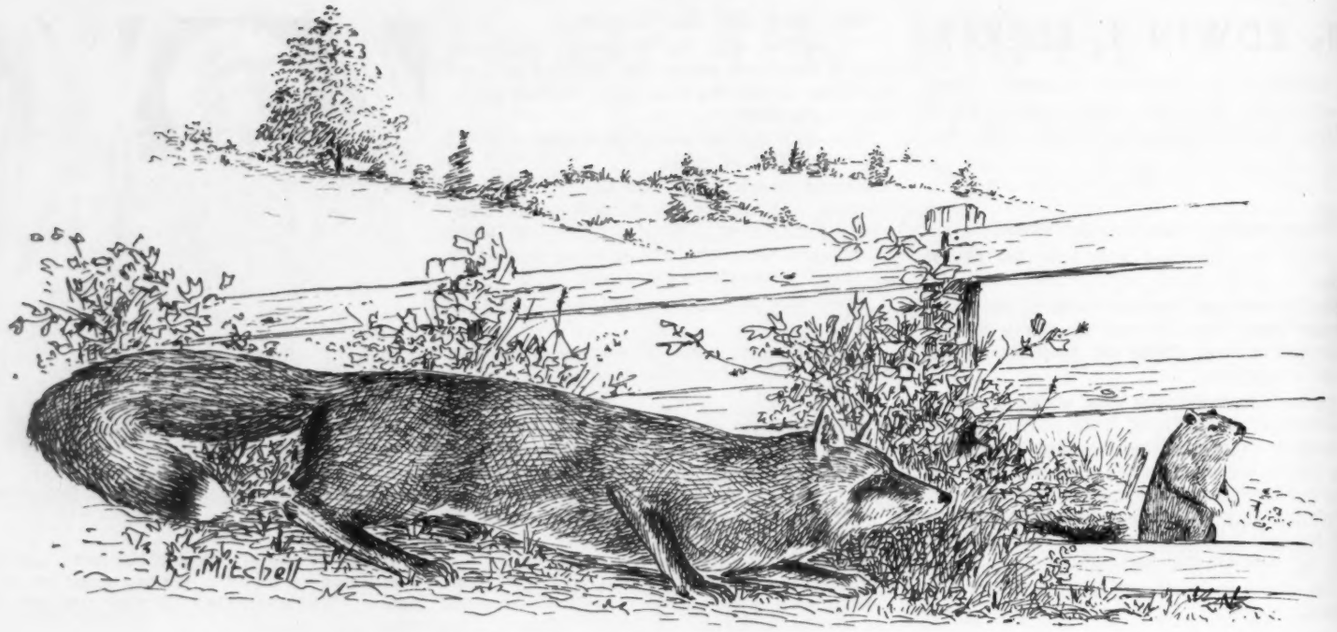


Fig. 2. Woodchucks are often stalked and caught by red foxes.

RED FOX FOOD HABITS STUDY IN PENNSYLVANIA

THE red fox *(Vulpes fulva)*, a fur-bearing predator, has provoked much discussion among sportsmen. Some sportsmen consider the red fox extremely harmful, others feel that it is beneficial, and still others maintain that the red fox is of neutral value in its feeding habits.

During the spring of 1941,[1] the writers undertook a study of 195 red fox stomachs provided through the cooperation of the Pennsylvania Game Commission and trappers.

During the 14 years, April 15, 1915, to May 31, 1929, the Pennsylvania Game Commsision paid a $2.00 bounty on red foxes. A total of $112,300 was paid out by the Commission during the period as bounty payments on red foxes (Gerstell, 1937). The Commission has paid a bounty of $4.00 on the red fox in Bradford, Columbia, Lycoming, Montour, Northumberland, Snyder, Sullivan, Tioga, Union, Cameron, Centre, Clearfield, Clinton, Elk, Jefferson, McKean, Potter, Butler, Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, and Warren Counties since July 1, 1940. In the spring of 1941 the Commission set up a committee to study the status of predator control in Pennsylvania and to look thoroughly into the entire predator-bounty problem. The writers hope that their findings may be of aid to this committee as well as to other interested parties.

Earlier studies on the food habits of the fox include those of Nelson (1933), who reported on 120 stomachs of red and gray foxes from Virginia; Hamilton (1935), who reported on 229 stomachs of the red fox from New York and New England; and Hamilton, Hosley, and MacGregor (1937), who reported on scats of red foxes from central Massachusetts during late summer and fall. Dearborn (1932) carried on a fecal analysis of the red fox in Michigan. Errington reported on the food of mid-western foxes (1935) and on the food of the Iowa red fox (1937, 1937a). As conditions in the above states are different from those found in Pennsylvania it was deemed advisable to carry on a red fox food habits study in this state.

Weaknesses are inevitable in any such study where the animals are taken for a bounty. Most bounty-trappers are interested primarily in getting the animal, and most of these men use bait. Consequently, many items appearing in the stomachs may have been bait, rather than prey of the fox.

TABLE 1

Source and Number of Stomachs, With and Without Food*

County	With Food	Without Food	Total of Stomachs
Potter	78	35	113
McKean	22	11	33
Warren	15	10	25**
Tioga	3	10***	13
Crawford	12	0	12
Elk	5	3	8
Cameron	6	1	7
Clearfield	5	2	7
Franklin	1	0	1
Mercer	1	0	1
Totals	148	72	220

The stomachs were received in a formalin solution. They were washed, emptied into paper towels, and dried on steam radiators. The writers then measured the volume of the dried contents. Most of the red fox stomachs came from north-central Pennsylvania (table 1).

In reporting on the analysis of food habits of the red fox the writers presented the material in tables under columns of times occurring and total volume. This was done because a listing of occurence alone would not give a fair evaluation. Three woodchucks recorded without volume would probably appear as being secondary to 40 mice, whereas in reality the woodchucks would provide a much greater volume of food. The reader can obtain a much clearer idea as to the importance of the different food items when the occurrence and volume are presented

The 195 stomachs analyzed by the writers and the analyses of 25 somachs prepared by the Fish and Wildlife Service (see footnote, table 1) have been studied by months in order to obtain a better picture of food habits during the period in which the stomachs were collected: August 1940, 32 stomachs; September 1940, 87; October 1939 and 1940, 66; Noevmber 1940, 19; the fall of 1940, 4 of unknown date; December to March 1939-40, and January and February 1941, 11; and April 1941, 1.

Of the 32 stomachs obtained during August 1940, 20 contained food and 12 were empty. During this month Potter County supplied 25, 7 of which were empty; Cameron County supplied 1, which had food; and Tioga County supplied 6, 5 of which were empty. Woodchuck *(Marmota monax)* was first in volume; ruffed grouse *(Bonasa umbellus)*, grasshoppers *(Orthoptera)*, weasel *(Mustela* sp.*)*, short-

[1] Paper No. 31 from the Pennsylvania Cooperative Wildlife Research Unit. Fish and Wildlife Service (U. S. Department of The Interior), The Pennsylvania State College, the Pennsylvania Game Commission, and the American Wildlife Institute coopearting.

Authorized for publication on December 8, 1941 as Paper No. 1069 in the journal series of the Pennsylvania Agricultural Experiment Station.

*Department of Zoology and Entomology The Pennsylvania State College.

**Fish and Wildlife Service U. S. Department of The Interior.

*Since this report was prepared a number of stomachs have been obtained from Bradford County. These stomachs will be analyzed and reported on in the near future.

**Red fox stomachs sent by the Allegheny National Forest to the Fish and Wildlife Service, U. S. Department of The Interior, Washington, D. C., for analysis. The data are included in this report.

***Presumably these traps were not checked often enough to contain animals with food in their stomachs.

By P. F. English* and Logan J. Bennett**

Illustrations by R. T. Mitchell

★

tailed shrew *(Blarina brevicauda)*, and field mouse *(Microtus pennsylvanicus)* were listed in that order. In table 2 the foods eaten during August are arranged according to volume.

TABLE 2

Analysis of 20 Red Fox Stomachs for August 1940

Items	Times Occurring	Total Volume cc.	Percent
Woodchuck (*Marmota monax*)	6	212	38.9
Ruffed grouse (*Bonasa umbellus*)	2	85	15.6
Grasshopper (*Orthoptera*)	3	50	9.2
Weasel (*Mustela* sp.)	1	40	7.3
Short-tailed shrew (*Blarina brevicauda*)	6	36	6.6
Field mouse (*Microtus pennsylvanicus*)	1	25	4.6
Snowshoe rabbit (*Lepus americana*)	1	20	3.7
Grasses (*Gramineae*)	4	16	2.9
Red-backed mouse (*Evotomys gapperi*)	1	15	2.8
Unidentified hair (*Mammalia*)	1	10	1.8
Unidentified vegetation	13	10	1.8
Gray squirrel (*Sciurus carolinensis*)	1	10	1.8
Opossum (*Didelphis virginiana*)	1	5	.9
Beetles (*Coleoptera*)	9	4.5	.8
Birds (*Aves*)	4	4	.7
Animal fat	1	2.5	.5
Unidentified insects	1	*	*
Unidentified bone	1	*	*
Cottontail (*Sylvilagus* sp.)	1	*	*
Totals		545	99.9
Sticks	1		
Paper	1		
Dirt	10		
Red fox hair	9		

*Trace.

It will be noted that such materials as grass, sticks, paper, dirt, and fox hair were also found in stomachs. In a frantic effort to escape, trapped animals grab at materials about the trap. Likewise, when a fox catches a mouse or some other small mammal, it is apt to swallow some grass at the same time. Foxes frequently have their own hair in their stomachs as a result of their biting at trapped appendages. These items are listed separately at the foot of each table.

The writers analyzed 87 red fox stomachs for September 1940. Potter County supplied 42, 11 of which were empty; McKean County supplied 32, 11 of which were empty; Tioga County supplied 5, all of which were empty; Elk County supplied 4, 2 of which were empty; Cameron County supplied 2, 1 of which was empty; and Clearfield County supplied 2, 1 of which was empty. In table 3 are listed the items found in the 56 stomachs containing food. White-tailed deer *(Odocoileus virginianus)* occurred in the greatest volume, amounting to 24.4 percent of the total. Why deer should be so prominent in the September diet is not readily explained. In some cases it may have been carrion, while in other instances it may have been bait. Rabbit (mainly cottontail) *(Sylvilagus* sp.*)* was second in volume, amounting to 18 percent. The remains of rabbits (mostly represented by hair, on which the identification was based) were found in 11 stomachs. Opossum *(Didelphis virginiana)* occurred in four stomachs, representing 11 percent of the volume. Woodchuck occurred in seven stomachs and constituted 10 percent of the total volume, as did grasshoppers. Other items occurred more often but in smaller amounts.

The stomachs of 66 red foxes were analyzed for October 1939 and 1940. Of these, Potter County supplied 33, 13 of which were empty; Warren County (1939) supplied 25, of which the 15 with food were analyzed by the Fish and Wildlife Service (see footnote, table 1); Clearfield County supplied 4, 1 of which was empty; Elk County supplied 2; and Tioga County supplied 2. In table 4 are listed the items present during October; woodchuck led the list in volume. The writers have evidence

TABLE 3

Analysis of 56 Red Fox Stomachs for September 1940

Items	Times Occurring	Total Volume cc.	Percent
White-tailed deer (*Odocoileus virginianus*)	7	445	24.4
Cottontail	11	328	18.0
Opossum	4	205	11.2
Woodchuck	7	182	10.0
Grasshopper	7	180	9.9
Grass	16	87	4.8
Wild cherry (*Prunus serotina*)	5	51	2.8
Beetles	18	50	2.7
Beetles (*Coleoptera*, mostly *Chaenus* sp.†)	2	50	2.7
Field mouse	11	49	2.7
Unidentified vegetation	23	39	2.1
Unidentified mammal	4	32	1.8
Weasel	3	22	1.2
White-footed mouse (*Peromyscus* sp.)	1	15	.8
Fox squirrel (*Sciurus niger*)	1	15	.8
Gray squirrel	1	15	.8
Unidentified flesh	1	15	.8
Shrews (*Soricidae*)	4	15.5	.8
Birds	9	10	.5
Short-tailed shrew	4	7	.4
Unidentified insects	9	5	.3
Red-backed mouse	1	3	.2
Berries (*Rubus* sp.)	1	3	.2
Snake (*Reptilia*)	1	1	.1
Carrion-beetle (*Silphidae*)	1	*	*
Porcupine (*Erethizon dorsatum*)	2	*	*
Leaves	4	*	*
Unidentified hair	1	*	*
Totals		1,823.5	100.0
Sticks	3		
Paper	3		
Dirt	25		
Red fox hair	6		

†Identity by courtesy of Dr. S. W. Frost, Department of Zoology and Entomology, The Pennsylvania State College.

*Trace.

TABLE 4

Analysis of 42 Red Fox Stomachs for October 1939 and October 1940

Items	Times Occurring	Total Volume cc.	Percent
Woodchuck	7	335	30.8
Cottontail	13	198	18.2
White-tailed deer	3	108	9.9
Opossum	2	90	8.3
Gray squirrel	4	73.9	6.8
Red-backed mouse and Red squirrel (*Sciurus hudsonicus*)	1	60	5.5
White-footed mouse	4	53.3	4.9
Field mouse	6	41.2	3.8
Ruffed grouse	2	35	3.2
Black cherry	8	26.5	2.4
Domestic chicken (*Gallus domesticus*)	1	17	1.6
Skunk (*Mephitis* sp.)	1	15	1.4
Red squirrel	1	9	.8
Beetles	6	6	.6
Unidentified mammal	1	6	.6
Grasses	6	5	.5
Birds—mostly small feathers	4	3	.3
Blue jay (*Cyanocitta cristata*)	1	3	.3
Apple (*Pyrus malus*)	4	2.5	.2
Cave cricket (*Ceuthophilus* sp.)	3	.3	.03
Beetles (*Carabidae*)	2	.2	.02
Porcupine	2	.1	.01
Oats (*Avena sativa*)	1	.1	.01
Leaves	4	.1	.01
Unidentified vegetable matter	11	*	*
Spider (*Arachnida*)	1	*	*
Totals		1,088.2	100.18
Dirt	13		
Rags	5		
Red fox hair	2		
Sticks	1		

*Trace.

TABLE 5

Analysis of 14 Red Fox Stomachs for November 1940

Items	Times Occurring	Total Volume cc.	Percent
Cottontail	5	222	60.2
Ruffed grouse	1	50	13.6
Field mouse	6	47	12.7
Snowshoe rabbit	1	20	5.4
Weasel	1	10	2.7
White-tailed deer	1	9	2.4
Unidentified vegetation	6	9	2.4
Grasses	1	1.5	.6
Porcupine	3	*	*
Totals		368.5	100.0
Dirt	6		
Leaves	6		
Red fox hair	2		
B-B shot	1		
No. 6 shot	1		
Cloth	1		
Rubber	1		

*Trace.

(Continued on Page 22)

Fig. 1. Red foxes are excellent mousers.

OUTDOOR LIVING

By Dr. E. Laurence Palmer

Dangerous or Annoying Animals

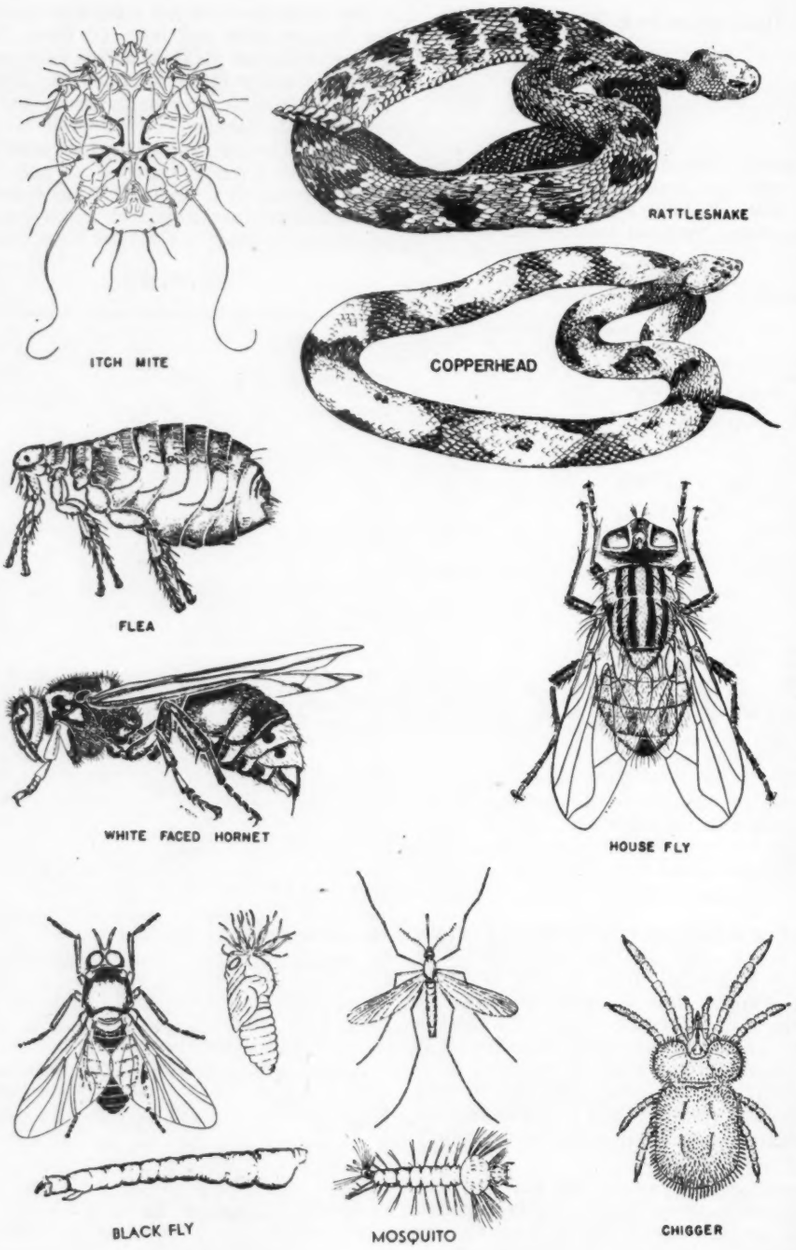
Hikers should be prepared not only to attract friendly and harmless animals, but to protect themselves against those which may be unpleasant or dangerous. Any wounded animal may be really dangerous, and many will fight if their young or their liberties are threatened. Usually there is little to fear from the bears, wolves, and mountain lions, which have had so much publicity. While you are worrying needlessly about a bob-cat, a porcupine may chew up your canoe paddle. If you are a novice, the cry of a great horned owl or of a long-eared owl may frighten you into thinking that some mad animal is loose in your neighborhood, when your real danger is that mosquitoes, chiggars, fleas, no-see-ums, or itch mites, may be about to attack. Ants are more likely to steal your food supply than are wolverines. More of you will suffer from the attacks of yelow jackets whose nests you may disturb in going through brush than will ever be bothered by wolves. Therefore, it is well to know some means of combating these commoner creatures which may interfere with the joys of your trip.

A handful or so of powdered sulphur rubbed onto your skin where your belt or garters bind may help to limit the roamings of chiggers.

Gloves and head-nets may keep away some of the flies which bite but these coverings have little effect on the punkies, or no-see-ums, which are so small that they can go through most nets. Oils such as citronella, pennyroyal, and similar preparations may help keep down the numbers, but on hot days these wash off quickly and are not long effective. Camps should be located where there is a breeze to blow these pests away when they are abundant; or they may be driven from a tent or from a site by smudges, which unfortunately are only slightly less unpleasant than the insects. Among the bothersome flies are the humpbacked black flies, the mosquitoes, the spotted-winged deerflies, and some of the horseflies.

Insects which sting as do the bees and wasps usually do not attack except when provoked. Many stings may be dangerous, and, if about the eyes, may cause a person to lose his way because of inability to see. Spirits of ammonia dabbed on the sting with a cloth may help relieve the pain. Similar treatment may help with other insect injuries, particularly with the unpleasant rash caused by the caterpillar of the Io moth.

Rattlesnakes and copperheads are the only poisonous snakes in the State. One should be able to recognize them and should avoid them at all times. It is never smart to show off by handling these reptiles. If one is bitten, a doctor should be called immediately. First-aid books give suggestions for treatment.



HELP FEED

WILDLIFE

THIS WINTER

OUTDOOR LIVING

This is the fifth of a series of Outdoor Hints reprinted from Cornell School Leaflets by special permission.

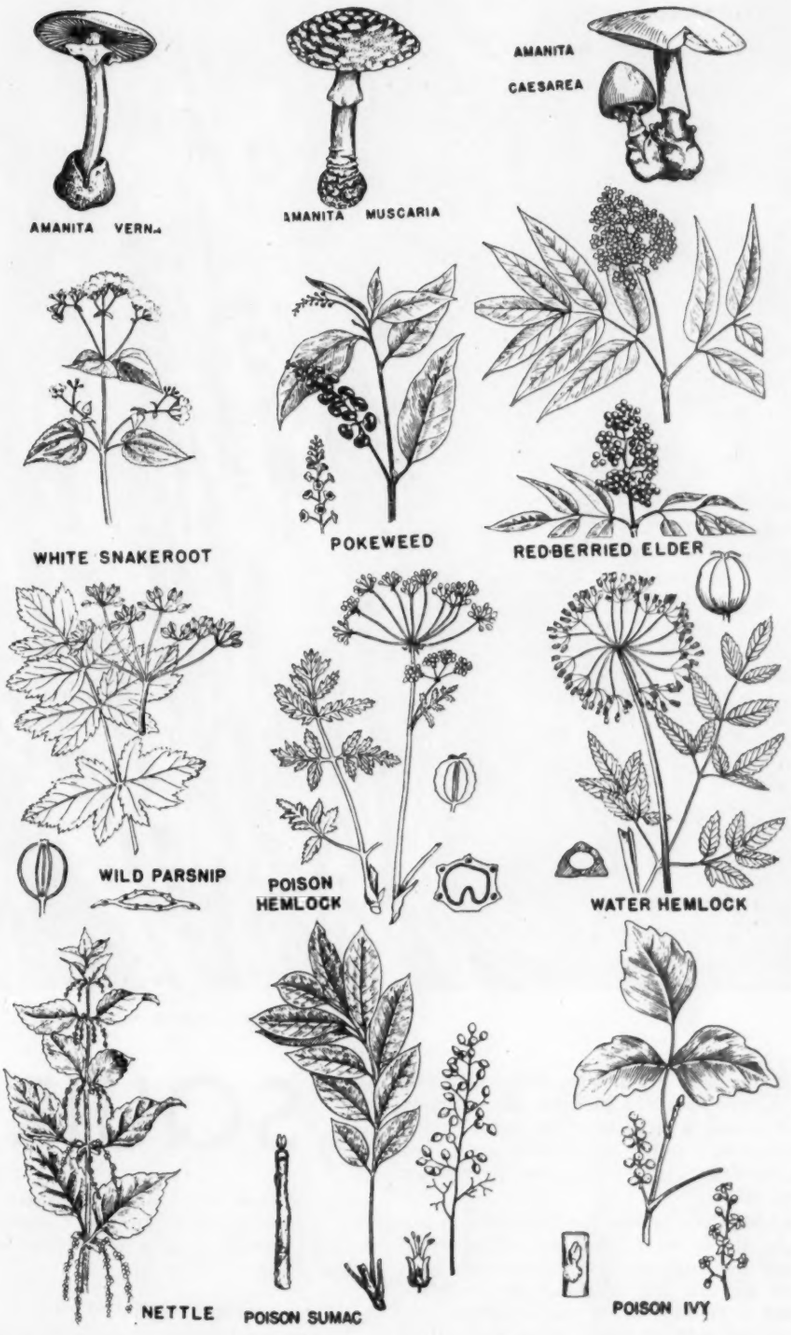
Dangerous Plants

Most indoor or outdoor plants are harmless or highly useful, but some which one may see in the open are dangerous. A few of these are illustrated. Some are dangerous to touch or even to approach. Others may be dangerous if eaten by man or by animals from which we get food. There is no one way in which all dangerous plants can be recognized.

Probably the plant which most quickly makes its presence felt uncomfortably is the stinging nettle. However, the skin irritation caused by this plant passes quickly and is soon forgotten. Wild parsnip, if wet, sometimes causes a rash which may persist for a considerable time. It commonly grows in wet gravelly places near swimming pools where bathers come out to rest. Poison ivy, which grows either climbing or erect and in a great variety of places, may cause serious trouble. Ordinarily, persons are poisoned by direct contact, but the gummy poisoning principle, urushiol, may be carried on soot from smoke when the bark and leaves are burned, or on objects such as clothes or tools. If a person who is susceptible comes into contact with poison ivy, he should wash the exposed parts thoroughly with hot water and a soap containing much alkali, such as laundry soap. Soaps which contain oil, such as castile, should not be used. A five-per-cent solution of potassium permanganate painted on the skin helps, but severe cases should be treated by a doctor. Eradication of poison ivy and of poison sumac, which is more dangerous though fortunately less common, is discussed in extension bulletin 191, "Poison Ivy and Poison Sumac", published by the New York State College of Agriculture, at Cornell University. A helpful list of dangerous plants is given in extension bulletin 441, "Some Plants Dangerous to Touch".

Poison hemlock and water hemlock have fleshy roots which appear edible but are extremely poisonous. They have been mistaken for artichokes, and some who have made the mistake have died. They should be recognized and avoided as food. Even toy whistles made from the hollow stems may cause poisoning. Fruits of red-berried elder look attractive, but often cause digestive trouble if eaten. Scoke, or pokeweed, berries are poisonous, at least to some persons, and the root is even more dangerous. The young shoots, however, if cooked thoroughly, are as delicious as asparagus. White snakeroot, so common in woodlands in late summer and fall, may poison the milk given by cows which feed on it.

With the fungi, the safest thing to do is to avoid them all unless you are sure you can identify the edible species. Pay no attention to the silver-spoon or the peeling tests. *Amanita verna* is deadly poisonous while *Amanita caesarea*, which has many features in common, is edible. The worst of these is *Amanita muscaria*. Three thousandths of a gram of muscarin, the poison in these plants, may be a fatal dose for a man.



PLEASE SEND IN YOUR GAME KILL REPORT

Photo by Eugene C. Tate, York, Pa.

SQUIRREL TALK

By R. L. Watts*

MY memory walls are decorated with many beautiful pictures of squirrels. Father owned a large tract of virgin timber in Clearfield County which was my happy playground during my boyhood days, from 1880 to 1890.

The conditions before the lumberman's axe wrought havoc were ideal for all kinds of wildlife: chestnuts, acorns, hickory nuts, butternuts, walnuts and beechnuts were plentiful, and it is doubtful if the squirrels ever suffered for lack of food. Mast was stored in den trees and hollow logs and each species of squirrels made provision in its usual manner for a long winter feast.

There were five boys in our family and all were extremely fond of the woods and streams. Hunting and fishing were our favorite sports. An assortment of muzzle loading guns adorned the corner of the living room and during the open season wild game, especially squirrels, constituted an important part in the diet of a family of eleven members. In the fall of the year a gun was generally carried on trips through the woods to neighbors and to grandfather's home, which usually ended with the possession of a rabbit, perhaps a grouse or two, or more likely some squirrels.

*Former Dean Agricultural College, Pa. State College and present head of the Predatory Animal Control Committee of the Game Commission.

Squirrel Migration

The mass migration of squirrels is not common though it has been observed on more than one occasion. Only once was it my privilege to witness it. It was in the spring of the year before the new foliage appeared. This eastward migration was among big timber in dense woodland, and hundreds of grey and black squirrels were jumping from tree to tree and also traveling under the trees.

The largest migrations of grey and black squirrels occurred many years ago when most of our country was covered with virgin timber. John H. Chatham of McElhattan, Clinton County, reported a great mass southward movement in October 1865. The migration lasted fifteen days during which thousands of squirrels were slaughtered. It was estimated that less than five percent of this migration were greys.

Various causes are given for mass migrations. It seems that the lack of food may be the most important in recent years, when extensive virgin tracts of timber no longer exist to provide ample nourishment for the animals. Over-population was probably the outstanding factor many years ago.

The Color Question

There is general agreement that the black squirrel is not a distinct species but is a color phase of the grey. Inasmuch as blacks and greys are born in the same litter there is no plausible reason to think otherwise. Last November a friend observed a black and a grey squirrel carrying nesting material into the same hole of a den tree.

It is interesting to note that some of the records of the enormous early migrations in northern and north central Pennsylvania call attention to the fact that the majority of the animals were blacks. It seems to me that more than half the squirrels killed in Clearfield County 50 to 60 years ago were blacks while only one in a kill of 10 in the fall of 1939 was black. I have observed in the Hammersley Fork region of southern Clinton and northern Clinton County that they are in the proportions of about two blacks to one grey. In Centre County I have seen only one black squirrel, though black squirrels are often seen 25 to 35 miles to the north. Is food the chief element in determining the color of this beautiful and fascinating animal? This is a question for our scientists to answer.

Moving Pictures

Last fall we had a most delightful experience taking color movies of greys and blacks. Two dozen or more were having a grand time carrying hickory nuts from a wood lot of a few acres to the state forest. They worked the hardest early in the forenoon and late in the afternoon, though every hour of daylight found some of the animals at work. The usual thing was for a squirrel to carry one hickory nut but the more ambitious ones conveyed two with no apparent difficulty. Many bushels of nuts must have been stored for winter use.

While sitting against a hickory tree with the movie camera resting on my knee a squirrel ran part way up my back. Some of my friends think this was unmistakable evidence that I am nutty. And I presume this is true with reference to squirrels for I think they are the most interesting and beautiful of our game animals. Furthermore, they have great economic value as food and for their persistence in planting the nuts or seeds of some of our most valuable timber species. Not only do they make provision for the susten-

(Continued on Page 23)

Protecting Feeding Shelters

By JOHN S. DITTMAR

★

VARIOUS types of feeders have been used successfully in the feeding of our upland game during the winter. Care was always taken to produce types of feeders that would conserve the food used, and to place them in such a position that game could readily acquire the food.

A mild open winter simplifies our feeding program. At such times, most grains can be placed on the ground, scattered among the leaves, giving the turkey, grouse, squirrel, etc., an opportunity to seek their food in their natural way, thus picking up stray nuts, acorns, dried berries, grit, etc.

Unfortunately, our Pennsylvania winters are not always mild. Deep snows, sleet and ice are common at least during several weeks of the year. Blizzards, with sweeping winds, lowering temperatures, high snow drifts, have worked untold hardships on all forms of wildlife.

Natural food supplies are uncertain. White oak acorns, one of the most savory foods eaten by our woodland friends, bear a crop only in certain years. The dogwood berry, red oak acorn, green briar, frost grape, along with the dewberry, huckleberry and blackberry may be affected by hard spring rains and heavy sharp frosts.

Artificial feeding during the winter is therefore necessary, especially in the wild turkey range. Food plots planted on old abandoned farm or wood plots provide food for game in the immediate section up to certain periods of the winter. Our mountainous regions are too large to always have these advantages, thus feeding in those vast areas must be done by sportsmen, Boy Scouts and farmers. They must aid the Game Protectors and Fish Wardens to get food to the proper places, and to place it carefully.

Various types of feeders are recommended and are illustrated in Bulletin No. 11—"More Food for Upland Game" issued by the Commission. Every sportsman should have this valuable booklet in his den, hunting camp and home. At least those who are interested in conservation.

Photo by John Sedam

Well sheltered feeder in Refuge No. 49, Bedford County.

During the past few years the abundance of deer has caused a considerable problem in the feeding of small game because corn and other grains placed for wild turkeys, squirrels and grouse were all consumed in a very short time by deer—leaving nothing for the smaller game.

Believing that this difficulty could be overcome, a new type of deer proof feeder was constructed as an experiment in our refuges on State Game Lands 48, 49 and 73 in Bedford and Blair Counties during January 1941.

Locating this feeder near a corn crib in these refuges, we laid off a plot 40 feet by 40 feet. Locust or chestnut posts were planted 3 feet deep and 10 feet apart, using W.P.A. and N.Y.A. labor. The bottom rail was raised 10 to 12 inches off the ground, to permit game to enter under the wire and rail. The top rail was placed 55 inches from the center of the lower rail. Ten rods of No. 11 deer proof fence 55 inches high was then fastened to the rails and posts. In order to make entrance convenient, a 3½ or 4 foot gate was included. Inside the area, a 14 foot by 14 foot feeder and a 3 foot high shelter were built. Wire baskets for holding corn were placed on trees. Corn placed on 20 penny spikes is better because the squirrels cannot take the ear and carry it out of area.

This type of feeder was constructed for the purpose of keeping deer away from the corn and scratch grains. Their success was apparent in February, less than a month after they were constructed. An eight-inch snow covered the mountains. Deer had a beaten path around the enclosed area. Squirrels and grouse were attending regularly. We had turkeys in mind while the pens were being built. We thought the new wire and peeled posts might keep the noble old bird at a distance. To the contrary, Land Management Protector Orrie E. Smith observed turkey tracks near the fence which he erected with N.Y.A. help. He noticed where the turkey's

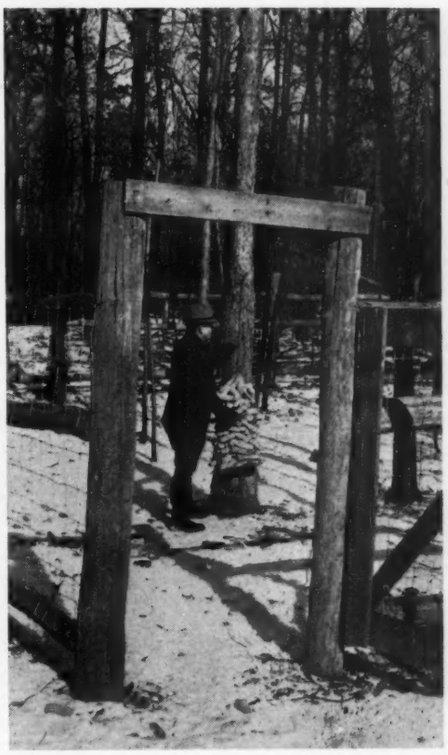


Photo by John Sedam

Deer-proof feeding shelter on Game Lands No. 49, Bedford County.

breast was rubbing in the snow under the rail. He took a shovel and at several places scooped the snow from under the rail. A few days later he and John Sedam were walking to the feeder when they noticed turkeys within the enclosure, and saw them fly out.

(Continued on Page 24)

Sportsmen help feed wildlife. Here a feeder is being replenished by a member of Peck's Pond Sportsmen's Association.

HOW MANY HAWKS?

By B. L. Whitacre*

Female Sparrow Hawk

MANY sportsmen maintain that the woods are full of hawks while, on the other hand, many bird lovers stoutly declare that there are practically no hawks in the forest. In an effort to find out what the status of hawks was in Centre County, Pennsylvania, a survey of nesting hawks was begun May 10, 1940, under the supervision of Dr. Logan J. Bennett.

The study area, which was selected at random, lies between two mountain ranges and extends from the junction of Routes 322 and 550, northeast on Route 550 to Filmore, Filmore to Lemont, Lemont to State College. This includes approximately 8,000 acres, 75 percent of which is woodland and forest; the remaining 25 percent, agricultural land. This area is rather typical of central Pennsylvania and should represent a fair sample of hawk environment in this region.

The area was subdivided into smaller tracts which were systematically covered. A record was kept of adult hawks seen during the nesting period, and an attempt was made to locate their nests.

Twelve hawk nests were found, and they were of the following species: five cooper's; one broad-winged; one red-shouldered; and five sparrow. Owl nests were not hunted but were recorded when observed. Two screech owl nests were found.

The sparrow hawks observed in this study nested in dead limbs of living oak trees, with the exception of one nest that was in a tree that was entirely dead. The nests were generally 20 to 30 feet from the ground, and the trees bordered fields or lanes. Three of the five nests observed contained four or five eggs. One nest had three eggs, and the remaining nest had two young and no eggs when it was located.

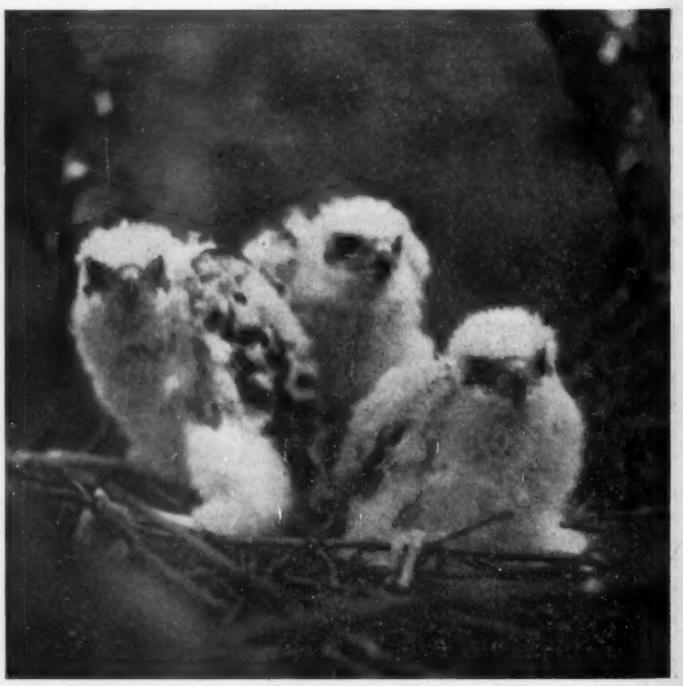
Three cooper's hawk nests were found in pine trees, and two were in oak trees. The nests were constructed of sticks and lined with bark. The height of nests from the ground varied widely. The lowest was 15 feet from the ground and the highest 40 feet. Three nests contained four eggs; but one nest had five eggs and another, two eggs.

The red-shouldered and broad-winged hawks preferred dense forest. The red-shouldered hawk built a stick nest 30 feet from the ground, situated in the fork of a living oak tree. The broad-winged hawk nested approximately 50 feet from the ground in a

(Continued on Page 24)

*Student, Pa. State College.

Cooper's Hawk Fledglings



Broad-winged Hawk Fledglings

Pheasant Chicks in November

By W. J. STADELMAN[1] and J. A. HARPER[2]

ARTIFICIAL illumination to stimulate reproductive activity of chickens and turkeys during off seasons is now a well established practice. It has been found that Ringnecked Pheasants (*Phasianus colchicus torquatus*) subjected to like treatment respond similarly.

Considerable research has been reported on the effect of artificial illumination on pheasants and quail. Martin (1935) published results obtained from using all-night lights with young and old pheasants. By giving artificial light from 5:00 p. m. to 6:00 a. m. during December and January, pheasants over 1 year old were brought into production after 26 days of illumination. Forty-six days of artificial illumination were required to bring 6-month-old pheasants into production. Martin reported poor fertility during the first 3 weeks of production.

Pheasant eggs were obtained by Bissonette and Csech (1936) after 30 days of lighting. They used a 60-watt incandescent bulb for increasing length of day by 3 to 5 hours. Supplying a light intensity of 106 foot-candles for alternate one-hour periods, thus giving the birds a chance to rest in darkness, Bump and Clark (1939) received eggs from hens after 23 days of lighting.

The normal time for confined pheasant hens to start production is about April 1 (Bissonnette and Csech, 1941). Field studies by English (1933) in southern Michigan and Randall (1940) in southeastern Pennsylvania showed that wild birds commence laying at the same time. Production under natural conditions usually stops by August 1, according to Randall (1940). English (1933) reported finding some field nests of pheasant eggs as late as early September.

On September 10, 1941, three experimental groups of ringneck pheasants were placed in separate 10-by-12-foot colony brooder houses with attached 9-by-10-foot wire-floored sun porches. Each house was lighted continuously day and night with a 25-watt mazda light bulb without a reflector. Light intensity at 6 inches above floor level was 1.5 foot candles, as measured with a Weston photometer.

Two of the three groups were 16-month-old pheasants that had stopped normal production on August 10, 1941. One of these groups contained 1 male and 3 females, the other 1 male and 6 females. The third group consisted of 4 females and 1 male hatched in March, 1941, from eggs produced by use of artificial illumination. Thus, these latter birds were 6 months old at the start of the experiment.

All birds were fed an adequate breeding mash and a scratch grain mixture containing corn, wheat, oats, and barley. Fresh water was available at all times.

On September 29, after 19 days of illumination, the group of 16-month-old birds containing 3 females laid 3 eggs. The other group of yearling hens started production after 32 days of illumination. The third group, composed of young birds, came into production on the 38th day of lighting.

All groups are still in production (November 23, 1941). A total of 156 eggs has been laid. This is an average of 12 eggs per hen in 56 days from the first egg. Production was low at the start of the experiment but has improved steadily. Six eggs, the highest number produced on any day to date, were laid on both November 15 and 22.

[1] Paper No. 32 from the Pennsylvania Cooperative Wildlife Research Unit. Fish and Wildlife Service (U. S. Department of The Interior), The Pennsylvania State College, the Pennsylvania Game Commission, and the American Wildlife Institute cooperating.

Authorized for publication on December 8, 1941 as Paper No. 1070 in the Journal series of the Pennsylvania Agricultural Experiment Station.

[2] Department of Poultry Husbandry, The Pennsylvania State College.

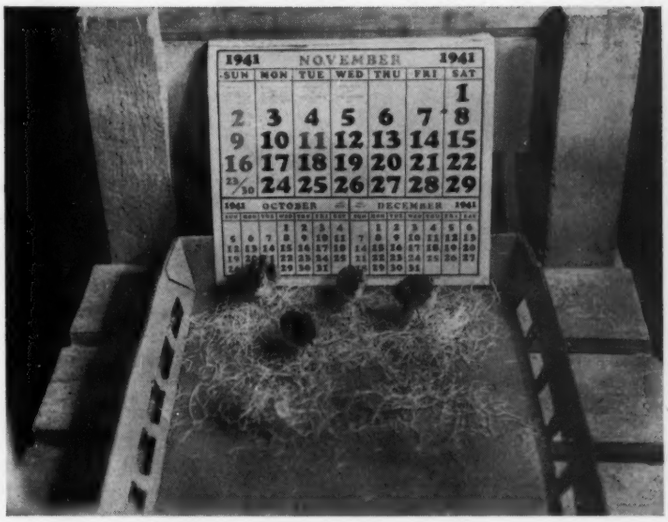


Figure 1. Pheasant chicks hatched in November 1941.

All eggs suitable for hatching purposes were, or are being, incubated. On October 4 seven eggs were set. The next setting, consisting of 40 eggs, was placed in the incubator on October 26. A third setting of 50 eggs was made November 9, and a fourth setting of 50 eggs was made November 23. All eggs were incubated according to recommendations made by Callenbach and Hiller (1933).

All eggs in the first setting were infertile. In the second setting, tested for fertility at the end of 2 weeks of incubation, 23 of the 40 eggs set were fertile, giving a fertility of 57.5 per cent. Almost all of the infertile eggs tested out were laid during the early part of October. For the second setting all three pens produced some fertile eggs. Fertility of the third setting of 50 eggs was 86 per cent.

The results to date check closely with those of Martin (1935). In his report Martin suggested that cold weather was partially responsible for low fertility. This suggested explanation does not apply to the results obtained here as the work was conducted in the early fall months. A more probable explanation is that the females responded to stimulation of the night lighting more rapidly than did the male pheasants. This is known to be the case with turkeys.

On November 19, 1941, 17 pheasant chicks hatched from the 23 fertile eggs set on October 26 were taken from the incubator (fig. 1). This result was, therefore, a 74 per cent hatch of fertile eggs set, which is a satisfactory performance during the normal reproductive season of ringnecks.

On the basis of work reported, it is concluded that sexually mature pheasants may be activated to reproduce at any season of the year by using artificial illumination.

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Old lumbering town

TEXAS

Photos courtesy of Pennsylvania Dept. of Forests and Waters

HAVE you ever been to Texas? Oh no, I do not mean the State of Texas, but a small village situated in Lycoming County, just over the Tioga County line, about four miles from Nauvoo.

If you had visited this place many, many years ago you would have found a wild and mountainous region, the knob-like hills covered with a heavy growth of pine and hemlock timber and a stream of clear, cold water flowing down a very narrow vale, the only outlet, without climbing a steep mountain side, from this deep bowl among the rugged hills. Birds, wild animals and perhaps occasionally a tribe of wandering Indians were the only occupants of the place.

But history tells us that as early as 1799 mills were erected by John Norris, on the headwaters of Little Pine Creek, near the present village of Texas. Norris came from Philadelphia as the representative of Benjamin Wistar Morris, who had the largest interest in the Pine Creek Land Co., and the mills here were known as "Morris Mills." Here, also, Morris opened a school, in which he and his wife taught. The accounts of this school vary in the different histories, or there may have been two schools, but this doesn't seem probable. The history of Lycoming County says there was a school, about 1806, near the present site of Texas known as "The Wilderness Seminary." A bold venture for that period, it met with considerable success, and was the only school of its kind in northern Pennsylvania. Many of the persons who helped to make history, both in Lycoming and Tioga Counties were at one time enrolled in this school.

At first "Morris Mills" did not prosper as a town, but later settlers came, land was cleared and cabins built. One of the early settlers on the hill above Texas wanted glass for the windows of his cabin. He walked to Williamsport to obtain this glass, and carried it all that distance strapped on his back. He set the bundle down and a man who was helping to build the cabin dropped a hammer from the roof. It fell on the bundle of glass and broke many of the panes. But this settler was determined to have glass for windows, so he walked back to Williamsport after more.

With mills operating, the little village grew until at one time there were about twenty-five houses here. A store flourished for a while, then was given up and the settlers drove to Block House (now Liberty) for their supplies.

The mills were run by water power, two ponds storing the water and thus furnishing sufficient power at all times. A road had been built up one of the hills, across what is now Route 84, then down Dixie Run to meet the one from Morris to Blackwells. All the sawed lumber, output from these mills, was hauled over this road to Blackwells and rafted down Pine Creek to the Susquehanna and so to market in Williamsport or other towns along this river. Pine shingles were also made in these mills, but most of these were taken to Block House. Last summer (1940) when visiting this place, we saw a house being reshingled and were told that the old pine shingles they were tearing off had been on the house for over sixty years.

A school house was built, the children coming from far away, even from Oregon Hill. This building is still standing but has been remodeled into a dwelling house.

A hotel was opened in this small village. Here lived the men who worked in the woods and mills. At this time it was the hemlock that was being taken off the hills. Most of the pine timber had been removed long before. This hotel burned many years ago.

Finally a post office was established and the little village was officially christened "Texas." A mailboy brought the mail on horse-back from English Center, through Texas and Nauvoo to Block House and back again, making the trip once a week. The people of Oregon Hill, Lorenton and vicinity came down to Texas for their mail.

There is now living in Texas a man, seventy-six years of age, who was born and has spent his entire life in this village.

Many logs were hauled to the mills with ox teams, though some of the settlers who were clearing their land also had horses. A woman, now nearly eighty-five years of age, who was born and spent the early part of her life in Texas, told me that when a young girl she often helped her father haul logs to the mill. She drove a pair of colts, making three trips while he made two with the oxen.

In the very early days the settlers often heard the cries of panther or other wild animals. Dr. Frederick Reinwald, who practiced his profession in Liberty township was killed by a panther. This tragic accident happened about four and one-half miles below Texas.

Now the mills and ponds have disappeared; the hotel and some of the houses were destroyed by fire long ago. At the present time only six houses and the ruins of another remain to show where once was the busy lumbering village of Texas.

The stream flowing through the village and down the narrow valley is the headwaters of Little Pine Creek and was first known by this name. Afterward it was called Zimmerman's Creek and later Texas Creek—the name by which it is now known. Little Pine Creek is now the stream formed by the junction of Block House and Texas Creek. In the early days a road was built down this valley, sometimes on the mountain side high above the stream, then again down nearer to the creek level. It is a lovely forest road.

Many small villages rose among the hills of northern Pennsylvania during the lumber-

Old style up-and-down sawmill used during the 1800's. Capacity 300 to 400 feet per day.

By MAZIE SEARS BODINE

From "Wellsboro Gazette"

A brief story of the early history of this colorful section in Lycoming County over the Tioga County line; a paradise for birds and wild game, it boasts beautiful scenery and picturesque waterways, and is ever a lure to the natnre lover.

•

ing era, later to be abandoned and finally to entirely disappear. One such was situated on Dixie Run, just below the present site of the CCC Camp. By the stream stood the mill, run by water power, and sawing into lumber the logs brought off the mountain sides. A few workers' houses were clustered nearby. And this small place was called "California."

Once, when the mill was shut down and the men all away, a small boy playing here started the mill and didn't have the strength to shut it entirely off. I suppose he was a very frightened youngster. I asked him what he did—if he went after someone to shut it down, and he said, "No I ran for home and it would still be going for all I know who stopped it!" It was many years before he told anyone about it. He is now eighty-five years of age, but can still see, (very distinctly) a water wheel slowly turning and hear the sound of machines running, while he, as a small boy was flying down the road, away from a force he had started but could not stop.

The country around Texas is still wild and mountainous, but the pines and hemlocks that once covered the knob-like hills are gone. The hills are now covered with deciduous trees and shrubs that give them a mantle of green in summer, but reveal their rugged character in late autumn after the leaves have fallen. And the small stream still goes gurgling and laughing down the narrow vale between these hills.

If you would like to visit the site of California and the present small village of Texas follow these directions: Drive south from Wellsboro on Route 84. At the lower end of Morris, after crossing the railroad, keep the right hand road down toward Blackwells.

The town of Morris also has an interesting history. As early as 1800 one Samson Babb settled here and built his cabin near the bank of the stream that now bears his name—Babb's Creek. He purchased 450 acres of timber land from the Pine Creek Land Co. He built the first saw-mill in Morris township. This, like all early mills was run by water power. The lumber sawed during the first year was floated down Babb's Creek to its mouth. It was to be rafted down Pine Creek to the Susquehanna River, but a sudden flood swept it all away. This was a great disaster to the owner of the little mill, but bravely he carried on, having better luck the next year. Samson Babb was largely instrumental in getting a state road built up Pine and Babb's Creeks and so through to Wellsboro. He died in October 1815, and was buried near his dwelling in Morris. The highway now passes over or near his grave.

Just below Morris you will pass the site of Hoytville. Here at one time was located the largest steam tannery in the world. A railroad came from Blossburg, through Arnot and on into Hoytville. Over this road hides were brought in and tanned leather shipped out. This mammoth tannery when in full operation had a capacity of 1000 sides a day, some of the hides coming from far-away South America. The tannery was long ago dismantled and torn down. The company built about one hundred houses for the use of their employees. These have also been taken down and the lumber removed. All that is now left are a few crumbling foundations, beside which there may be an old-fashioned rose or lilac bush, a mute reminder that here was once a little home where lived a woman who loved flowers. The old turntable where the engines were turned around is still here. Some of the foundations of the tannery may still be seen, but they are nearly overgrown with shrubs and wild flowers. The tannery was on the lower side of the road, and the houses on the upper side. Thus another thriving village of the lumbering era has disappeared. (This tannery used many cords of hemlock bark annually).

Ox cart hauling logs.

Woods crew at work; year 1800.

Not far below the site of Hoytville was at one time a place called Doane. Here another saw-mill run by water power was erected by Job Doane about 1848. This mill he operated for forty years. After his death his son, Frank Doane operated it until it was washed away in the flood of 1889. In 1890 it was replaced by a steam-mill built on higher ground. Here near the mouth of Stony Fork Creek Job Doane built a very large house having seventeen rooms. His son, Frank, was born in this house and lived here for many years He now lives in Morris and is eighty-five years old. This large house was burned not many years ago. The Doane school was situated on the upper side of the main road, almost directly opposite the mouth of Stony Fork Creek. It was one of the earliest schools in Morris township, and at one time there were about eighteen houses and cabins in the vicinity, within a radius of a mile of the school, the children from these homes coming to the Doane school to learn their ABC's. Mill, school and houses are now all gone, the great Doane place being the last one to succumb to Time's changes.

Near here a road to the right crossing a bridge over Babb's Creek goes up the very narrow, beautiful and picturesque Stony Fork Creek valley, finally coming to the village of Stony Fork. In a book of historical stories this stream is called "The Rocky Branch of Babb's Creek."

Do not turn up this valley but, keeping on the main road, take the first turn to the left and go up Dixie Run. At the left of the main road near the mouth of this stream was once the famous Dixie Run camping and picnic ground. About forty or forty-five years ago several churches in the township united and held meetings here every summer. For a

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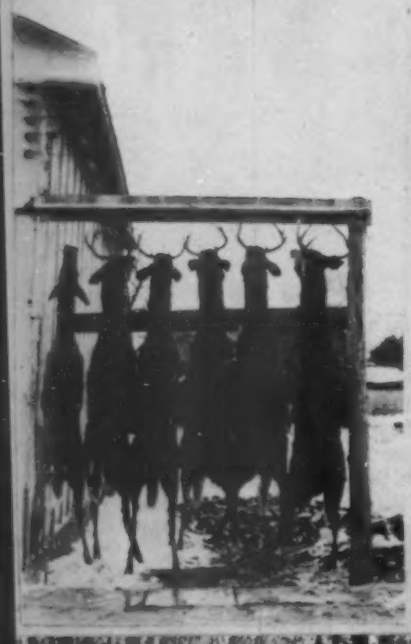
Highlights of the Large Game Season by Staff Photographers and GAME NEWS contributors



FAIRVIEW CAMP

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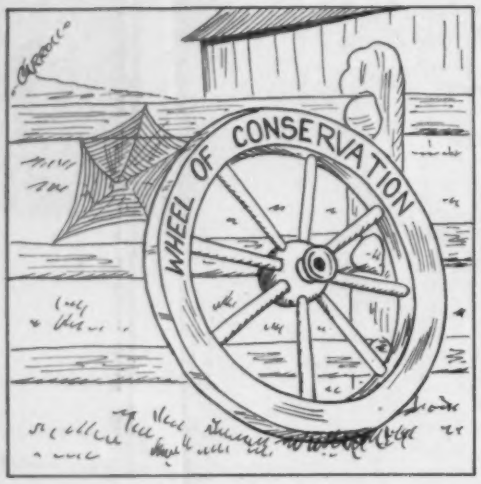
CONSERVATION EDUCATION

By SAM F. BREWSTER*



The wheel lay idle.

MR. Chairman, Ladies and Gentlemen of the Fourth Annual Meeting of the National Conference on Conservation Education and Publicity.

As men and women engaged in conservation education work you realize that you are a vital spoke in the Conservation Wheel. The Conservation Wheel is a big one and it took a lot of grunting and groaning on the part of a lot of people to set it in motion at all. The Wheel lay idle for many long years while innumerable destructive agencies such as fire, wind, rain, careless people, ignorant people and exploiters of every description, and in every walk of life were at work on it. The wildlife spoke of our Conservation Wheel was nearly whittled away. The forestry spoke was worn thin. The scenic resources spoke was terribly weak in places and so on around the hub until the entire wheel was flimsy and undependable.

Then came a master mechanic who called together a great horde of willing and intelligent workers who were ready and willing to put their shoulders to the wheel. Today that Conservation Wheel is spinning like none of us thought possible. It is gaining momentum rapidly and where it will stop no one knows. Like any huge moving object it attracts attention and like a snowball rolling down a mountainside it gets larger as it goes. People are talking about conservation today who eight years ago would not have known enough about it to have found the word in a dictionary. Right there we have a big problem and one that will require time and work to correct. There never was a truer saying than, "A little learning is a dangerous thing." Thousands of Americans only partially aware of the problems confronting conservationists today are roaring at public officials, complaining to one another, and generally engaging in a campaign of destructive criticism. They know just enough to think the problem of restoring and conserving America's natural resources is an easy one. They believe, therefore, that if a new game and fish director does not deliver fried catfish and quail on toast to each and everyone of them each day, he is a crook and should be replaced by a friend of theirs.

In other words, it looks to me as if we have a big educational problem on our hands. An educational problem that must be carried on simultaneously with our other work. I despair of ever being able to do much with the rank and file of Americans that have passed the thirty year mark without learning the necessity of conservation. The chances are he grew up with the idea that all natural resources were put here for him to live off of and that it is his God given privilege to use them as often and as much as he sees fit to do so. It is difficult to change his opinion in most cases, because his mind has set like concrete on that idea and it requires more than verbal dynamite to separate the man from the notion. If this were not so, we could dispense with our conservation officers and put the huge sum of money it requires to pay for law enforcement into conservation education.

Many of our people are living with one foot in the past when our soil, forests and wildlife were in such profusion they were in the way and actually impeded colonization of this continent. It was necessary to clear forests and kill animals in order to build homes and to live in security. Now we have arrived at a point where we may have an equally hard time in recouping and conserving our badly depleted resources in order to live in comfort and safety. Millions now living have heard their fathers and grandfathers describe in such glowing terms the abundance of resources that existed when they were young that it is hard for them to realize the changes that have been made in such a short period of time.

Americans are intelligent in many respects. We are world traders and builders, we have constructed the greatest railway system, the greatest highway system, and the tallest buildings in the world. We have developed high standards of morals and ethics and the best schools and colleges and sanitation systems that history has ever seen. We have done in two centuries everything a great civilized nation might be expected to do, and yet, with all our advancement, learning and civilization, we have depleted our valuable, necessary, life giving natural resources as much in two hundred years as China has done in four thousand years.

It is, therefore, only proper and right that we people actively engaged in conservation work should recognize our mistakes of the past and take steps to correct or prevent them in the future. We know that it is possible to take young boys and girls and by proper teaching instill in their minds an understanding of what we their fathers, have allowed to happen to their country and to stir in their imaginations desire to help correct, as far as may be, that condition. If this fundamenal thought had been applied through conservation teaching twenty-five years ago on a large scale, and in the proper way, I am of the opinion that large sums now being spent on conservation law enforcement would be spent instead in acquiring new parks, administering old ones; acquiring state forests, game refuges, fish hatcheries and other assets that are slow in coming in sufficient numbers to appease the lay citizen because of shortage of funds for those purposes. This, I believe to be the most glaring fault committed by conservationists of the past. Too much emphasis has been placed on law enforcement and not enough on education. You seldom make a conservation convert out of a man whom you arrest and fine. You merely make him more cautious, and harder and more expensive to catch next time—an evader. The same man, during his youth, could have been taught why it is not to his advantage to burn the woods, kill over the limit, dynamite and seine the streams, run his furrows straight up and down the hills, exploit the scenic areas, allow his top soil to wash away and generally contribute to his own ruin as well as that of his community and nation. He would have then been a **convert** instead of an **evader.**

Twenty to thirty years from now the boys and girls of today will have authority and control over the natural resources of this nation. They will handle those resources wisely or indifferently as we see fit. We people in attendance at this Conference and other conservation leaders scattered over the nation hold the key to the situation. Just as long as boys and girls are allowed to go through schools that do not include intergraded courses in conservation, just that long are we putting off the day when conservation of our natural resources is the sacred trust of everyone instead of the sworn duty of a few poorly paid, greatly abused public servants.

Unless we do teach the younger generation facts about our natural and non-renewable resources we cannot hope to be much further along twenty years from now than we are at present. We are pouring out about all of the money that the treasuries will stand. Our limited personnel is overworked and law violators who are apprehended are far less than those who escape. I am of the definite opinion

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They were willing to put their shoulders to the wheel.

*Director, Department of Buildings and Grounds, Auburn, Alabama. Made before the National Conference on Conservation Education and Publicity at Pickwick Dam, Tennessee, September 30, 1941.

Coast Boys Have To Hunt Deer

By F. Wallace Taber

(Reprinted from the Pittsburgh Press)

F. Wallace Taber of San Diego, Cal., winner of the first scholarship awarded aspiring rod and gun editors by the Outdoor Writers Association of America, went through the Pennsylvania deer hunting season with John G. Mock, the Press' All-Outdoors editor and chairman of the committee which selected Taber.

★

PENNSYLVANIA vs. Pacific Coast deer hunting.

'I've only enjoyed Pennsylvania hospitality for a week, Johnny, so the comparison you request will have to be based on that. Another week, and perhaps a foot or so of snow, might change my mind, but right now I'll say that it's a different kind of hunting altogether. Different terrain, different vegetation, in fact, as you well know, it's a different species of deer.

Even so, there are quite a few similarities between hunting mule deer in my part of the country and hunting whitetails in yours. After all, the mule deer is merely the western cousin of the whitetail, and many of their habits are almost identical.

I believe we do a bit more actual hunting to get our deer than you do to get yours. You see, we haven't the numerous CCC roads which criss-cross your mountains. Such roads as are present to make accessible the innermost recesses in the event of forest fires are closed to vehicular traffic during the hunting seasons. Out in the West, we don't care much for "upholstery hunters." Such nimrods are looked upon with contempt.

Fears Road Hunter

I've noticed particularly the gunner you term a "road hunter." His hazardous zigzagging down the mountain while alternately giving attention to the roadway and then the surroundings (with accent on the latter) just wouldn't mix with our tilted terrain. I recall innumerable occasions in the Kettle Creek country where we were almost forced from the road by "watchful" hunters. You seem to have more than your share of that type.

Most of our hunting is what we know as still hunting. It entails very slow and deliberate stalking through the forest with eyes and ears on the alert—and thumb on the safety.

We do have a slight advantage in California, however, for the majority of our trees and shrubs are evergreens and the forest floor in much of the state, due to the carpet of fallen needles, is never noisy.

The usual procedure is for two or three hunters to "work" a canyon from the mouth to the head—more or less a "drive" on a very minor scale. We never resort to the barking, owl-hooting or whooping to drive the deer on; in fact, opening day in Clinton County was the first time I ever heard such goings-on. I'll have to admit that for awhile I was a bit worried about all the foreign sounds; our woods didn't have them, and I began to wonder about the denizens which could give voice to such chatter. It was quite some time before I realized that it all originated with fellow hunters.

Hunters 'Dress' Here

But, back to the western "drives" for a moment. One hunter usually walks along either ridge while the third noisily makes his way up the center of the canyon. All three hunters are in a position to get shooting in many instances. Our mule deer do a bit more stiff-legged jumping to get a look-around than do your whitetails. You have a slight edge, however, on running game, for mule deer don't have the white "flags" so frequently seen in your hunting territory. Mule deer just stick their tails between their legs and make off like whipped dogs. Sometimes they will clear a 20-foot-wide and 10-foot-high manzanita or chaparral bush in a single leap in their hasty exit; at other times, they sneak off much as do your whitetails.

I was favorably impressed by the manner in which Pennsylvania deer hunters dress. I've never seen anything to equal it from a safety-first standpoint. Michigan comes close in advocating the wearing of red garments, but the Far West still resorts to clothes which blend with the surroundings. The none-too-distant frontier custom of wearing buckskin breeches and shirts is still fresh in the minds of the nimrods. Some of our more progressive hunters have started advocating the wearing of red, but it will take quite some time before it catches on as it has here in this state.

Another of your safety-first regulations which struck me as being vital in the reduction of hunting accidents is that which makes it illegal to have loaded firearms in a car. California has no such regulation, but it does have one which Pennsylvania could readily adopt; that of prohibiting the discharge of a weapon within a certain distance of the highway.

Game Laws Respected

Both states could materially improve their safety regulations by adopting, or rather combining, the two features—Pennsylvania that of forbidding the discharge of a firearm within 150 yards of a highway; California that of outlawing the practice of carrying loaded shotguns and rifles in cars.

I was greatly interested in the respect shown your game laws. In the instance of road hunters, many parties were checked by Fish Warden George Cross, yet not a single violation was encountered. Pennsylvanians are not only law-enforcement conscious they are definitely safety-first minded.

We in California, as well as those in most other states, think that Pennsylvania has an enviable game record of which to be justly proud. With a take of nearly a half million deer during the past four years, it ranks head and shoulders above all other states. Your bag of 187,000 last year was nothing short of stupendous. Such kills, however, are bound to reflect themselves in following seasons and the present one seems a good indication of what is to be expected for several years to come.

Hunters everywhere seem in agreement that the combined buck and doe season of 1940 is a direct cause of this year's smaller number of deer. Seasoned hunters whose camps took their limits on the opening day in previous years had but a single trophy hanging from the pole the first week. One camp of 17 hunters on Rock Run, which "filled its roster" almost at pleasure during former seasons, hung its first "rack" on the third day. And, from the looks of the boys' clothes, they had been bucking laurel, rhododendron and briars steadily since the dawn of opening day.

(Continued on Page 27)

Photo by S. V. Sedlak

Here's a bunch of nice ones.

"THE QUIZ BOX"

"What more could you ask for of any crow call?"

PUMP GUNS FOR CROW SHOOTING

Q. As I expect to do a lot of crow shooting this winter, I would like to know if I may use six shots in a pump gun for crows?

C.A.

A. No. Pump guns for crow shooting or for shooting an other wild birds or animals in season, including the unprotected species, may not be loaded with more than three shells in the magazine and chamber combined. The three-shell limit applies to the killing of any wild birds or wild animals in the State, except big game.

* * *

STAGGERED SEASONS ON PHEASANTS

Q. In what year was the small game season staggered last, whether just on pheasants, or rabbits, or both?

A.D.M.

A. The last year in which the season on pheasants was staggered was 1934. In that year, the shooting of rabbits was open six days a week during the month of November, but the killing of male ringneck pheasants was legal only on certain specified days. The pheasant season ran three consecutive days at a time, then from two to three days intervened before shooting was again legal that season. The year 1928 was the only one in which the rabbit season was staggered. In that year, the rabbit season was November 1 to December 15, with hunting permitted Thursrday, Friday and Saturda of each week during the month of November, and six days a week during the first fifteen days of December.

* * *

MINIMUM WEIGHT ON BEARS

Q. Was there ever a bear season in which a bear had to weigh a certain number of pounds, possibly fifty or more, or has it always been specified that a bear must be one year old or more?

C.J.J.

A. The Game Commission has no record of a minimum weight limit ever being placed on bears. Although cub bears have been protected for many years, no attempt has ever been made to place a weight limit on them.

WHAT CALIBRE SPRINGFIELD?

Q. Kindly advise calibre of U. S. Springfield Model 1884. It seems pretty near 40 but I would like to know exact size also if it is possible to still get shells. What is range of above and would it be practical for deer? J.R.W.

A. In answer to your letter of December 4, covering inquiry of John R. Weible of Philadelphia on U. S. Springfield Model 1884 rifle, the following may be the data you require.

The 45-70 cartridge is literally one of the world's best deer cartridges. It kills quickly and positively; spoils little meat; its bullet plows through brush without much deflection from twigs; in good rifles it is finely accurate; and it may be reloaded readily.

Probably the 1884 model mentioned is really a saddle gun or carbine, with barrel much shorter than the regulation 30 inches or more of the rifle. The standard rifle ammunition contained 70 grains of black powder and a 500-grain soft lead (or 1 to 16 tin and lead) bullet; the standard carbine ammunition contained about 55 grains of black powder and 405-grain bullet. Either load works well on deer. The sporting load which deer hunters liked best, perhaps, was the Gould—a load of 70 grains of black powder and 330-grain hollow point bullet. Also perhaps available are 300-grain loadings of soft lead bullets.

Ammunition of 45-70 sizes is still standard from the factories, and on the shelves of most dealers. You don't get black powder loadings as a rule. If you want that, you must load it yourself. Black powder has the advantage of filling the shell sufficiently to support the bullet; although it fouls the barrel badly. Modern loadings are smokeless; and the powder does not fill the shell—requiring an indented ring in the brass to keep the bullet from going back too far. You can buy 405-grain smokeless loads with lead bullets; and the same with jacketed soft point bullets. You usually find, however, a 300-grain jacketed soft point bullet on the shelves. The latter load comes in standard velocity; or in high velocity, high pressure loading.

A jacketed bullet can be used in the 1884 Sprinfield, but not a high velocity loading, for entire safety. The regulation black powder cartridges develop only about 20,000 pounds pressure; and the Springfield 1884 was built for a limit of only 25,000 to 30,000 pounds pressure. The modern high velocity loadings in this cartridge give up to 30,000 and 35,000 pounds pressure. Most 45-70 smokeless loads use Hercules Sharpshooter powder, a double-base powder which is excessively hot and destructive only in the small calibers like 25-20; and appears to be thoroughly mild and practicable in this bigger bore.

The 45-70 500-grain load developed a velocity of about 1290 feet at muzzle; the 405-grain load a velocity of 1310 feet. Modern smokeless loadings give the 405-grain bullet approximately similar speeds; and

"THE QUIZ BOX"

give the 300-grain bullet upwards of 1400 feet velocity in "regular" loadings. The high velocity loadings are much speedier. Since we are discussing only the 1884 Springfield, we will not bother with H. V. ballistic figures.

The 45-70 (cartridge and rifle) was the subject of very advanced development by the U. S. Government. Its characteristics in every particular were worked out, with the result that it could give a good account of itself even at 1000 yards and 1200 yards. Certainly within hunting ranges of 200 yards, it is a real sporting cartridge.

Among the disadvantages of the 1884 Springfield 45-70 for hunting are the following. Any bullet fired at 1300 to 1400 f. s. velocity has a high trajectory. You must allow for three times as much bullet drop as with a 30-40 Krag; and begin to make allowance at about 125 yards, on deer. The bullet, traveling slowly, requires more head-lead on running game. The lock time of the rifle is slow. The gun is awkward. All these things add up to more game missed, and require greater skill in shooting.

I have a 45-70 Winchester of 1886 Model and wouldn't want to spare it for emergency use should more modern rifles be unavailable. In the past I have had a special light weight Winchester 1886 for this cartridge, with smokeless steel barrel, which handled the high velocity loads very well and weighed only 7¼ pounds. I liked that little gun. Sorry I don't have it now.—J. R. Mattern.

* * *

DIRECTION FOR DRIVING DEER

Q. Which is the proper way to drive for deer, with the wind or against it?

W.K.

A. It is advisable to drive for deer against the wind so the animals will not scent the hunters and flee before the hunters can sight them.

* * *

PERMIT FOR LIVE RACCOON

Q. May a raccoon taken legally in season in Pennsylvania be kept for a pet?

G.W.C.

A. Yes, a raccoon taken legally in season may be retained in captivity by obtaining a possession permit from the Field Division Supervisor in charge of the Division in which the raccoon is held. The addresses of the respective Division Supervisors throughout the State are shown on the folder given with each hunter's license. Under the law, permits to retain live raccoons must be applied for within five days after the close of the raccoon season. There is no charge for the permit.

* * *

NO LICENSE TO TRAIN DOGS

Q. Is it necessary to have a hunter's license to train dogs?

A. No. You will understand that no shotgun or rifle may be carried, nor may any injury be inflicted upon wild birds or animals while engaged in dog training.

"It is rumored that he has a past."

WHAT TO FEED BIRDS

Q. What should you feed birds in winter?

J.A.A.

A. So often we have heard, "A bird in the hand is worth two in the bush"; a saying that well suits the hunting season. But later when the hunter has gone, and the cold weather sets in, how well does this saying fit? If the two birds in the bush find food this winter they will be worth a whole family of birds in a next year's nest.

What care do you as a home owner give to the selection of shrubbery that will shelter, nest, and most important, feed the winter birds? What thought has your school board given to this question? What information have you as a teacher passed on to possible home owners? You in turn might well ask, "What thought has been given to this question by the Bureau of Parks"? In the past the answer to this last question might well be on the negative side, but from now on the answer will be different. For in the planning and planting of shrubs and trees along the new highway through Schenley Park consideration was given to this very question.

If neglected, the well manicured lawn or cultivated field will soon be covered with high grass, then weeds, berry bushes, and finally the familiar Elderberry, Locust, Hawthorn and Sumac. Wild Black Cherry trees soon appear and these thickets will attract all kinds of birds. This is not a suggestion that lawns be neglected, but is rather a suggestion to set aside such areas where possible to grow wild.

During the winter months Downy and Hairy Woodpeckers, Chickadees, Nuthatches, Tufted Titmice, Cardinals, and others may be seen pecking away at the familiar Sumac cones. Many insects hibernate inside of that sticky, hairy seed mass and those birds with bills that are too weak to crack the seeds soon find such insects and eggs. The European Starling was quick to find the sumac and substitute it for similar foods back in England. Our garage mechanic does not like the English sparrows around his feeding station but will not kill them because he says, "They take bugs off the rose bushes."

Goldenrod, Teasel, Thistle, Yarrow,

(Continued on Page 28)

Red Fox Food Habits Study in Pennsylvania

Continued from Page 7

Young red fox photographed by Miss Margaret Meade of Moscow, Pa. Miss Meade was within 15 feet of the den when she took the above photo.

that some trappers used woodchuck for bait. The cottontail was second in volume and occurred most often—13 times. Next in volume were the white-tailed deer, opossum, gray squirrel *(Sciurus carolinensis)*, red-backed mouse *(Evotomys gapperi)*, red squirrel *(Sciurus hudsonicus)*, white-footed mouse *(Peromyscus)*, field mouse, ruffed grouse, and black cherry *(Prunus serotina)*, respectively.

For November 1940, 19 red fox stomachs were examined. These included 14 (4 empty) from Potter County, 2 (1 empty) from Elk County, and 1 each from Crawford County, Mercer County, and Clearfield County. The analysis of the contents of these stomachs is shown in table 5. During November the cottontail occurred in the greatest volume. Next in volume were ruffed grouse (occurred in only one stomach), field mice, snowshoe rabbits *(Lepus americanus)*, weasels, and unknown vegetation. Porcupine *(Erethizon dorsatum)*, listed here and in previous tables,

TABLE 6

Analysis of 4 Red Fox Stomachs from Cameron County During Fall of 1940

Items	Times Occurring	Total Volume cc.	Percent
Woodchuck	2	42	77.1
Field mouse	1	10	18.3
Beetles	4	1.5	2.8
Unidentified vegetation	1	1	1.8
Grasses	1	*	*
Porcupine	1	*	*
Totals		54.5	100.0
Red fox hair	1		

*Trace.

TABLE 7

Analysis of 11 Stomachs of Red Fox for December 1939 and January, February, and March, 1940, and January and February 1941

Items	Times Occurring	Total Volume cc.	Percent
Cottontail	9	875	88.8
Gray squirrel	1	85	8.6
Field mouse	1	25	2.5
Porcupine	1	*	*
Domestic chicken	1	*	*
Ruffed grouse	1	*	*
Totals		895	99.9

*Trace.

TABLE 8

Late Summer and Fall Foods of the Red Fox from an Analysis of 136 Stomachs

Items	Times Occurring	Total Volume cc.	Percent
Woodchuck	22	771	20.1
Cottontail	30	748	19.5
White-tailed deer	11	562	14.6
Opossum	7	300	7.8
Grasshopper	10	230	6.0
Field mouse	25	177.2	4.6
Ruffed grouse	5	170	4.4
Grasses	28	109.5	2.9
Gray squirrel	6	98.9	2.6
Weasels	6	87	2.3
Wild cherry	13	77.5	2.0
White-footed mouse	5	68.3	1.8
Beetles	37	62	1.6
Unidentified vegetation	54	59	1.5
Red-backed mouse	3	48	1.3
Unidentified hair and mammals	7	48	1.3
Short-tailed shrew	10	43	1.1
Snowshoe rabbit	2	40	1.0
Red squirrel	2	39	1.0
Unidentified birds	17	17	.4
Domestic chicken	1	17	.4
Fox squirrel	1	15	.4
Unidentified flesh	1	15	.4
Shrews	4	14.5	.4
Unidentified insects	10	5	.1
Blue jay	1	3	.1
Berries	1	3	.1
Apple	4	2.5	.1
Animal fat	1	2.5	.1
Beetles	2	2.2	.1
Snake	1	1	.03
Porcupine	8	*	*
Carrion-beetles	1	*	*
Cave Crickets	3	*	*
Spiders	1	*	*
Oats	1	*	*
Totals		3,836.1	100.03
Dirt	54		
Red fox hair	19		
Leaves	14		
Sticks	5		
Paper	4		
Rags	4		
Rubber	1		
B-B shot	1		
No. 6 shot	1		

*Trace.

is given in table 6. Woodchuck occurred in greatest volume, making up 77.1 percent of the total. Next in volume were field mice, beetles, and unknown vegetation, respectively.

Eleven stomachs from Crawford County for December 1939, January, February, and was indicated as a trace. The presence of porcupine quills in eight stomachs was evidence that foxes occasionally ate these animals.

For the fall of 1940, four stomachs with food were sent from Cameron County. The analysis of the contents of these stomachs March, 1940, and January and February 1941 were received and analyzed. The contents of these stomachs are recorded in table 7. Cottontails, gray squirrels, and field mice made up the bulk of the food, cottontails being the principal item in 9 of the 11 stomachs

One red fox stomach came from Franklin County in April 1941. It contained only cottontail remains.

In table 8 the late summer and fall foods are shown. Woodchuck was first in total volume, occurring 22 times for a volume of 771 cc. The next six times included cottontail, 748 cc. in 30 occurences; white-tailed deer, 562 cc. in 11 occurrences; opposum, 300 cc. in 7 occurrences; grasshoppers, 230 cc. in 10 occurrences; field mice, 177.2 cc. in 25 occurrences; and ruffed grouse, 170 cc. in 5 occurrences. Thirty known foods were recorded for this period, as well as six partially identified items—unidentified vegetation, unidentified hair and mammal, unidentified bird, unidentified flesh, unidentified insects, and animal fat—that occurred in small amounts. Incidental materials, such as dirt, red fox hair, leaves, sticks, paper, rags, rubber, and shot, appeared in stomachs of this period.

Nelson (1933), reporing on 15 red fox stomaches for January and February 1932 from Virginia, found the following items in Rabbit, 34.40; mice and native rats, 18.00; sheep, 13.07; poultry, 12.47; dried fruits, 9.60; order of importance on percentage basis. gray squirrel, 5.67; while less important were fleshy fruits, muskrat, game birds, small nongame birds, and insects, in the order named.

Hamilton (1935) analyzed 206 fall and winter red fox stomachs from New York and New England and found the foods to be as follows on a percentage basis: mice, 29.3; rabbits, 22.1; grasses, 13.9; carrion, 8.1; sticks, dirt, trash, 6.2; fruit, 5.3; insects, 3.4; poultry, 3.1; squirrels, 2.9; porcupine, 1.8; game birds, 1.4; shrews, 0.8; worms, 0.8; small birds, 0.5; and grain and nuts, 0.4.

Hamilton, Hosley, and MacGregor (1937), in a scat study of late summer and early fall foods of the red fox in central Massachusetts, state: "In the fall collection, fruits are represented, in order of their frequency, by apples, wild cherries, grapes, sarsaparilla, and service berries. Mammal remains are chiefly of field mice and cottontails; while deer mice and woodchucks are each represented once. Poultry and grouse are represented in a single scat; while another contained the belly plates of a garter snake."

Dearborn (1932) analyzed 300 red fox feces in Michigan in 1930 for the summer period and found the following percentages: Mammals, 40.14; birds, 10.47; bird eggs, 1.00; insects, 16.68; and fruits, 31.51. The mammals were divided into snowshoes, 46.80 percent; and mice and rats, 45.89. There was a high population of hares in this region. In 1931 Dearborn found in 280 red fox feces mammals, 91.68; birds, 1.12; reptiles, .14; insects,

3.42; and fruits, 3.64. Of the mammals taken in 1931, 81.0 percent were hares; 9.84, mice and rats. In the work of Dearborn the scats were collected in July, August, and September.

Errington (1935) examined 25 red fox stomachs with food taken between December 14, 1929, and February 7, 1930, in Wisconsin and found the following: "Cottontail *(Sylvilagus)* in 9; fox squirrel *(Sciurus niger rufiventer)*, 1; meadow mouse *(Microtus)* (a total of about 73), 19; deer mouse *(Peromyscus)*, 1; unidentified mouse-like mammal, 2; unidentified mammalian carrion, 1; domestic chicken, 2; small unidentified feathers, 2; cartilage from a large hare, 1; eggshells (from garbage), 1. Food in 10 of 13 red fox stomachs, taken between October 26, 1930, and February 23, 1931: Cottontail in 4; Norway rat *(Rattus norvegicus)*, 1; meadow mouse (total of about 25), 8; deer mouse, 1; domestic chicken, 1; small bird, 1. Food in 11 of the 14 red fox stomachs, taken between December 14, 1931, and February 3, 1932: Cottontail in 9; flying squirrel *(Glaycomys)*, 1; meadow mouse, 1; deer mouse, 1; unidentified mouse-like mammal, 3; domestic chicken, 3; mass of dirt and feather butts, 1."

Murie (1936) examined 768 droppings and found "The main food items in the red fox diet were cottontail rabbit, lemming-vole, meadow mouse, and beetles."

Summary

1. The writers examined 195 red fox stomachs and included in their report the analysis made by the Fish and Wildlife Service of 25 stomachs from the Allegheny National Forest. Of these 220 stomachs, 72 were empty.

2. Of the foods eaten the five most important were woodchuck, 20.1 percent; cottontail, 19.5 percent; white-tailed deer, 14.6 percent; opossum, 7.8; and grasshopper, 6.0 percent.

3. Incidental items, such as dirt, sticks, red fox hair, leaves, and paper, were frequently found in stomachs of trapped foxes.

4. Some of the woodchucks and deer may have been carrion and bait. Lack of information concerning the bait used by trappers may have resulted in an incorrect picture of the food of the red fox.

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SQUIRREL TALK

Continued from Page 10

ance of future generations of squirrels but they show more foresight than man in planting species which deserve general planting wherever conditions are suitable.

It is our opinion that in too many instances solid stands of pines are planted when there might be a mixture of conifers and deciduous trees which would furnish food for man and wildlife and also timber of high commercial value. In Clearfield County where magnificent specimens of giant white pines were cut the trees were nearly always associated with beech, chestnut, oaks, maple and other deciduous species.

When any adverse comment is made about planting pines in solid blocks the usual alibi is "Well, that's pine land," meaning of course that it is not suitable for hardwoods. This may be true in some instances but I am convinced that the deciduous trees could be used more generally, to the advantage of both man and wildlife.

A Confession

It was the last day of August about 1883. All the members of my father's family were to be away from the farm home for the day, except the youngest son, the writer of this article. Father assigned this lad enough work he thought to keep him busy until the family returned about supper time. However, a new shot gun caused the boy in his early teens to work with more than his usual speed and the jobs were completed by 4:00 P. M. Then what! That bright new gun, without doubt the best in the county, the boy thought, had been on his mind all day. He knew exactly where grey squirrels were feeding on beech nuts and it would be easy to get a few of them and have them ready to fry for supper. The season for squirrels in those ancient years opened September 1, and it was only 4 o'clock in the afternoon of August 31.

The mental struggle of the lad began right there and then. Gun in hand, loaded with a shell which he had filled, and squirrels just watiing to be bagged; Bang, bang, bang! Three fat greys lay on the ground, proof of a good gun and unerring marksmanship. The squirrels were dressed and washed ready for the frying pan just as the folks arrived.

"Ralph, why did you kill those squirrels"? asked my oldest brother. "Well, why shouldn't I, Sam" was the reply. "It was wrong for you to do so," he said, "and you had no business to kill them today." "Now Sam, let's be reasonable" said the boy. "You know the squirrels were on our land, that none of the neighbors ever hunt there, that the season opens tomorrow morning and also that the woods are teeming with squirrels." "Yes," said Sam, "I know all that, but the fact remains Ralph, that you have broken the law. Yes sir, you are a law breaker, and laws are made to be observed and respected whether you think they are good or bad."

I am sure both of us said a great deal more, but my brother had the best of the argument and it was an impressive lesson for me. I have known not boys but mature men, highly respected in the community to break the game and fish laws and all of them should know that laws are made to be "observed and respected."

"I haven't seen you since last hunting season, Tom, when we tossed up a coin to see who shot that deer . . . and you won, remember?"

white pine tree. The nest contained two buff-brown eggs, both of which hatched. This pair of hawks frequently lined their nests with green leaves.

The screech owls nested in woodland near the boundaries of fields. The nests were 10 to 15 feet from the ground and were in cavities in the trees. The nests each contained four young, one group of which were of the red phase; the other group was of the gray phase.

A detailed record of nests observed in this study appears in table 1, and identification numbers were assigned to each nest.

During the nesting season there were twelve hawk nests recorded on the 8,000-acre tract, or one hawk nest for about every 666 acres. In addition, two screech owl nests were found The observations in this study indicate

HOW MANY HAWKS?

Continued from Page 10

that the nesting and rearing season brought about a definite increase in hawk population in this area. Destruction of nests was found to be due to the following causes listed in the order of their importance: humans. crows, and mammals.

TABLE 1—Data on Hawk and Owl Nests

Species	Date	No. of young eggs	Type of woods	Height of nest	Tree	Diameter of tree	Condition of tree
Cooper's hawk	5/10/40	five eggs	woodland near fields	40 ft.	oak	18 in.	living
Cooper's hawk	5/24/40	four eggs	woodland near fields	45 ft.	oak	15 in.	living
Cooper's hawk	6/11/40	two eggs	woodland near fields	15 ft.	white pine	18 in.	living
Cooper's hawk	5/5/40	four eggs	woodland near fields	25 f.	white pine	30 in.	living
Cooper's hawk	6/10/40	three young	woodland margin of forest	20 ft.	white pine	12 in.	living
broad-winged hawk	5/11/40	two young	dense forest	50 ft.	white pine	30 in.	living
red-shouldered hawk	5/20/40		dense forest	30 ft.	oak	24 in.	living
sparrow hawk	6/16/40	five young	fence row	30 ft.	oak*	36 in.	living
sparrow hawk	6/10/40	two young	woodland	30 ft.	oak*	30 in.	living
sparrow hawk	6/28/40	three eggs	tree in field*	20 ft.	oak	48 in.	living**
sparrow hawk	6/10/40	four young	woodland	20 ft.	oak	18 in.	living
sparrow hawk	6/9/40	four eggs	margin of field	20 ft.	oak	18 in.	dead
screech owl	6/1/40	four young	woodland	15 ft.	oak	36 in.	living*
screech owl	6/10/40	four young	woodland	10 ft.	chestnut	24 in.	dead

*Nest in cavity.
**Nest in dead limb.

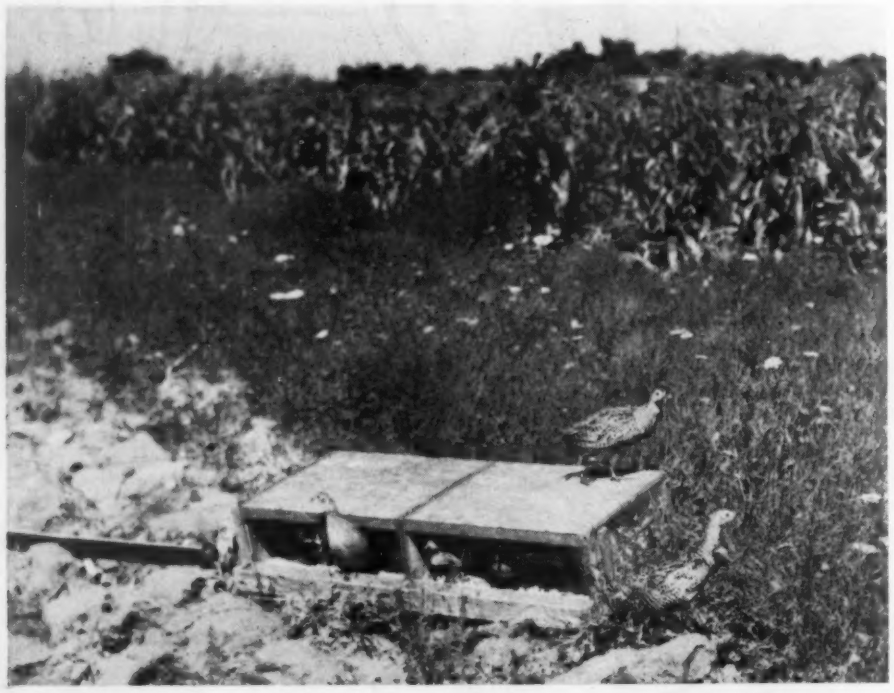


Photo by C. Gordon Krieble

Releasing Ringneck Hens

Protecting Feeding Shelters

(Continued from Page 11)

They saw where the tracks led to the fence and under and over to the shelter.

Early in February on State Game Lands 48 near Hyndman, George Thompson, W.P.A. foreman, and several of his crew, saw turkeys feeding within that enclosure.

Each year thousands of bushels of corn and scratch grains are fed within our State Game Refuges. Due to the scarcity of natural food, deer began to eat all the corn and grains they could find. Wire baskets were smashed. The suspended tray feeder was tilted enough to throw the corn out. In this new deer proof feeder we will save hundreds of bushels of grain each year, will feed more small birds and animals, and give them ample protection from all types of predators.

May Thatcher Cooke, of the Fish and Wildlife Service, recently reported some new findings made in connection with studies on the flight habits of North American birds. One of them was a 14-year old crow that had been tagged by A. L. Holm at Otto, Manitoba, in April, 1924, and was killed at Sherman, South Dakota, in January, 1938.

STOLEN FIREARMS

The following firearms have been reported stolen

1 Winchester 30-30 Model 94 Rifle, Serial No. 1211202. This firearm was stolen from Gilbert Barraclough, 2101 Chestnut Ave., Barnesboro, Pennsylvania, on November 19, 1941 while hunting in Montours Run, East Keating Township, Clinton County.

1 Winchester Carbine Model 94 Rifle, Serial No. 1254936 (Calibre not given). This rifle was stolen from the Pluebell Hardware Company, Wesleyville, Pennsylvania.

1 Model 70 Winchester 30-06 No. 31402 stolen from Harder's Sporting Goods Co., 336 Pine St., Williamsport, on Nov. 29, 1941.

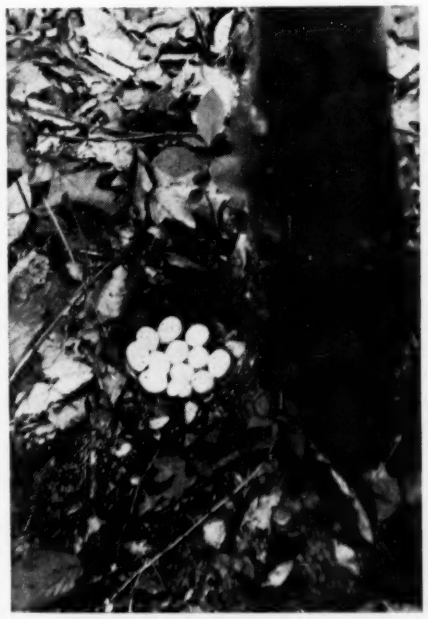
1 Colt .22 in a 45 cal, frame, officer's special, No. F342. Stolen near Roulette, Pa., from Charles A. Kuhns, Box 595, Niagara Falls, N. Y. Was in a brown leather holster, $10.00 reward.

Should any information be obtained on these firearms, kindly forward same to the owners of the respective guns.

MILD WEATHER PLAYS PRANKS ON WILD CREATURES

"On November 1, 1941, Mr. Milton Wilson of Blain, R. D., killed a female gray squirrel that contained four unborn squirrels. Mr. Wilson has hunted for 50 years and said that was the first time he had heard of such an incident. It was also reported that two other female squirrels were killed near the same section that contained young squirrels. Mr. Wilson killed his squirrel on his own land in Toboyne Township, Perry County."—Game Protector Harold E. Russell, Perry County.

Transplanting antelopes as a means of restoring this animal to former abundance is now being carried on by **New Mexico**, **Texas**, and **Colorado** using funds made available under the Act for Federal Aid in Wildlife Restoration.



Photos by Norman Heft

Nest of Ruffed Grouse

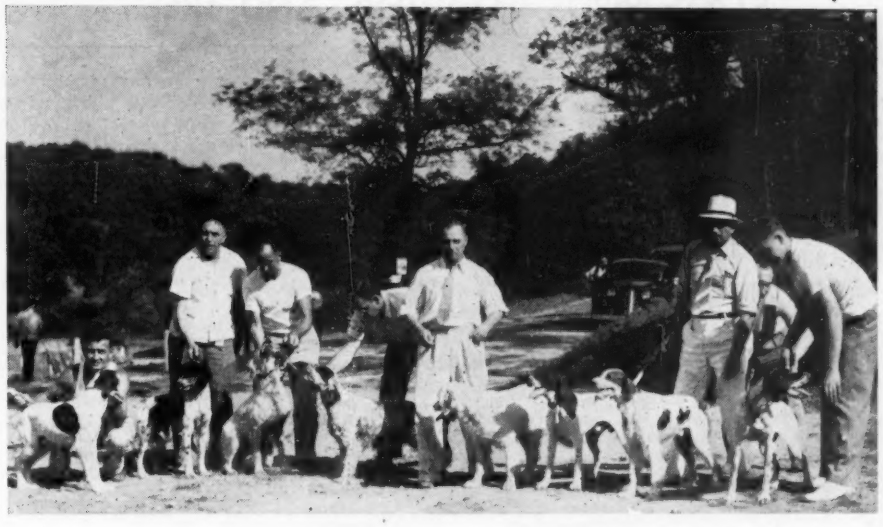


Photo by Leo A. Luttringer, Jr.

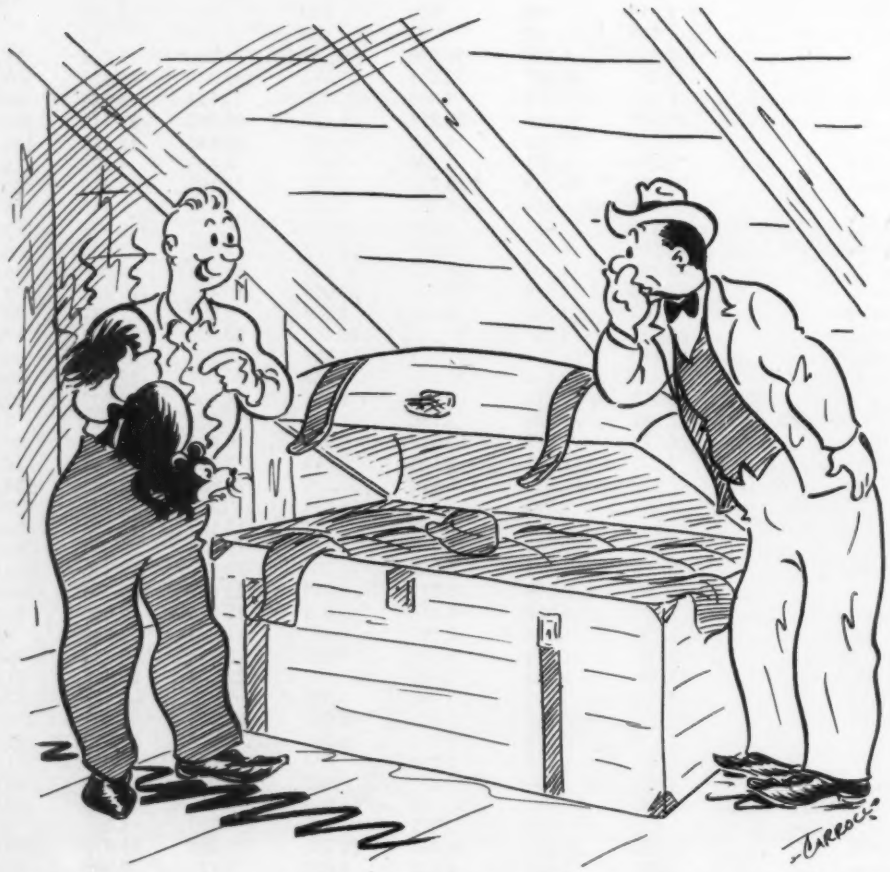
Bench show of the Capital City Field Trial Association. Above are the winners. Left to right: Harold Jones, Beaver Creek Ben; W. A. Balthaser, Newtown Kid; Bill Douglass, Gladstone Donnie; J. T. Smith, Freckles; Sturgis Davis, David Peck; R. Otis Carpenter, Frank of Madison; Herman Garman, Newtown Dan; and Jack Forrer, Lady Madison.

MIGRATORY BIRD HUNTING STAMP SALES

	8/14/34 to 6/30/35	7/1/35 to 6/30/36	7/1/36 to 6/30/37	7/1/37 to 6/30/38	7/1/38 to 6/30/39	7/1/39 to 6/30/40	Grand Total
Alabama	2,533	1,403	1,914	2,889	4,940	5,833	19,512
Alaska	2,000	2,380	1,708	2,094	2,227	2,761	13,170
Arizona	2,332	1,760	1,736	2,363	2,919	3,555	14,665
Arkansas	11,973	9,134	10,268	11,799	15,342	14,401	72,917
California	39,525	33,297	44,570	52,577	63,394	74,644	308,007
Colorado	10,482	6,695	11,917	10,517	18,666	22,663	80,940
Connecticut	4,372	2,116	2,381	3,249	4,318	4,904	21,340
Delaware	3,600	1,259	1,115	2,001	2,576	3,164	13,715
Dist. Columbia	1,204	958	1,017	1,105	1,378	3,421	9,083
Florida	6,704	4,431	5,774	7,175	10,424	13,009	47,517
Georgia	1,540	730	816	938	1,387	2,569	7,980
Hawaii	137	97	96	155	174	59	718
Idaho	9,840	6,610	10,526	10,138	15,608	19,064	71,786
Illinois	42,687	36,337	53,251	51,333	57,538	66 434	307,580
Indiana	8,250	5,379	7,648	12,311	14,724	18,686	66,998
Iowa	16,129	18,910	27,294	25,427	36,267	39,143	163,170
Kansas	17,334	17,353	16,118	18,858	20,495	18,536	108,704
Kentucky	2,314	1,291	1,136	2,676	3,465	4,564	15,446
Louisiana	20,081	10,242	13,721	19,366	31,190	33,870	128,470
Maine	6,539	3,214	4,527	5,546	7,812	8,349	35 987
Maryland	6,575	2,831	3,358	4,360	6,861	8,993	32,978
Massachusetts	14,124	6,033	7,380	12,161	12,087	15,048	66,833
Michigan	25,348	14,796	31,482	56,888	80,458	86,064	295,036
Minnesota	51,536	44,062	72,460	97,609	116,461	120,034	502,162
Mississippi	4,703	3,154	3,168	4,855	6,306	7,591	29,777
Missouri	23,001	14,080	17,149	16,469	20,034	26,961	117,694
Montana	14,120	10,474	14,903	15,884	19,978	24,836	100,195
Nebraska	21,336	17,818	20,280	22,939	30,847	26,588	139,808
Nevada	2,513	2,272	3,398	3,921	4,899	5,608	22,611
New Hampshire	1,641	829	1,166	1,688	1,864	2,727	9,915
New Jersey	12,739	6,040	6,517	9,921	14,486	16,936	66,639
New Mexico	2,671	1,681	2,164	2,173	3,524	4,187	16,400
New York	21,502	11,917	15,470	23,286	29,825	32,304	134,304
North Carolina	4,964	1,995	2,865	4,344	6,362	8,564	29,094
North Dakota	5,947	6,581	6,069	9,513	13,167	15,148	56,425
Ohio	10,407	7,001	10,493	14,662	19,076	20,680	82,319
Oklahoma	27,862	8,824	5,967	21,005	19,675	19,740	103,073
Oregon	13,199	9,709	13,772	19,540	22,435	26,774	105,429
Pennsylvania	8,751	5,088	5,458	5,613	13,353	16,008	54,271
Rhode Island	1,794	1,074	1,177	1,477	1,824	2,641	9,987
South Carolina	1,800	1,944	1,680	2,353	3,653	3,634	15,064
South Dakota	12,594	9,461	8,025	17,639	22,334	21,849	91,902
Tennessee	6,918	5,024	4,754	5,366	7,813	8,615	38,490
Texas	42,424	28,150	33,481	45,357	58,704	63,460	271,576
Utah	7,133	3,672	8,123	9,185	12,685	14,520	55,318
Vermont	1,754	1,116	1,256	1,810	2,263	2,851	11,050
Virginia	4,628	1,792	2,251	3,052	4,538	6,767	23,028
Washington	29,033	18,980	28,396	40,606	46,151	50,796	213,962
West Virginia	566	396	419	446	789	1,037	3,653
Wisconsin	40,769	35,154	48,999	61,783	79,688	84,075	350,468
Wyoming	3,073	2,660	4,010	4,607	5,731	6,896	26,977
	635,001	448,204	603,623	783,039	1,002,715	1,111,561	4,584,143

STATE BIRDS, FLOWERS AND TREES

State		Bird	Flower	Tree
Alabama		Flicker	Goldenrod	.....
Arizona		Cactus Wren	Sahuaro Cactus	.....
Arkansas		Mockingbird	Apple Blossom	Pine
California		California Quail	Golden Poppy	Redwood
Colorado		Lark Bunting	Columbine	Blue Spruce
Connecticut		.....	Mountain Laurel	.....
Delaware		Cardinal	Peach Blossom	.....
District of Columbia		Woodthrush	American Beauty Rose	.....
Florida		Mockingbird	Orange Blossom	Palm
Georgia		Brown Thrasher	Cherokee Rose	Live Oak
Idaho		Mountain Bluebird	Syringa	White Pine
Illinois		Cardinal	Violet	Oak
Indiana		Cardinal	Zinnia	Tulip Tree
Iowa		American Goldfinch	Wild Rose	.....
Kansas	(Western)	Meadowlark	Sunflower	Cottonwood
Kentucky		Cardinal	Goldenrod	Tulip Poplar
Louisiana		Brown Pelican	Magnolia	Magnolia
Maine		Chickadee	White Pine Cone	White Pine
Maryland		Baltimore Oriole	Blackeyed Susan	.....
Massachusetts		Veery	Mayflower	
Michigan		Robin	Apple Blossom	Apple
Minnesota		Goldfinch	Moccasin Flower	White Pine
Mississippi		Mockingbird	Magnolia	Magnolia
Missouri		Bluebird	Hawthorn	Hawthorn
Montana		W. Meadowlark	Bitterroot	.....
Nebraska		W. Meadowlark	Goldenrod	Elm
Nevada		Mt. Bluebird	Sage Brush	.....
New Hampshire		Purple Finch	Purple Lilac	.....
New Jersey	(Eastern)	Goldfinch	Violet	.....
New Mexico		Roadrunner	Yucca	.....
New York		Bluebird	Rose	Hard Maple
North Carolina		Carolina Chickadee	Dogwood	Yellow Poplar
North Dakota		W. Meadowlark	Prairie Rose	Green Ash
Ohio		Cardinal	Scarlet Carnation	Buckeye
Oklahoma		Bobwhite	Mistletoe	Redbud
Oregon		W. Meadowlark	Oregon Grape	Douglas Fir
Pennsylvania		Ruffed Grouse	Mountain Laurel	Hemlock
Rhode Island		Bobwhite	Violet	Maple
South Carolina		Carolina Wren	Yellow Jessamine	Palmetto
South Dakota		W. Meadowlark	Pasque Flower	.....
Tennessee		Mockingbird	Iris	.....
Texas		W. Mockingbird	Bluebonnet	Pecan
Utah		California Gull	Sego Lily	Blue Spruce
Vermont		Hermit Thrush	Red Clover	Hard Maple
Virginia		Robin	Flowering Dogwood	Dogwood
Washington		Willow Goldfinch	Rhododendron	.....
Wisconsin		Robin	Violet	Hard Maple
Wyoming		W. Meadowlark	Indian Paint Brush	.....



"I always put one in when I put my hunting clothes away for the season . . . it keeps the moths out!"

Nice buck, his first, shot by Richard Chaffe, Corry, Pa., in Warren County.

Hounds of the Ridge

(Continued from Page 5)

"Why?"

"'Coons been gettin' scarce of late."

"But . . ."

"No matter whether you come a long ways for this hunt or not. This 'coon's jest gonna sit tight and give us another chase sometime, maybe."

I smiled and glanced up at the eyes. The little animal had shifted his position.

"I'd still like to know how the blazes that hound keeps 'em off the ridge."

"Guess the 'coon round about here jest don't like beech trees, do they Burr?"

The hound stopped his clamoring and looked up at Jim, his tip-worn tail slapped his sides vigorously, and he whined.

I was cold again.

"Want to try the woods further east?" Jim asked.

I shivered. "No Jim. It's cold."

Jim chuckled. "So it is. Come on Burr." The hound ceased his antics like an alarm clock stops when the lever is clicked. He followed along beside us as we made our way over the ridge and toward the house. I glanced back once when we were on the other side of the ridge. The beeches were tall, cold, and aloof. Ghostly and eerily they stretched heavenward. I shivered and muttered to myself.

"What's that?" Jim asked.

"Nothing . . . nothing, it's just that those darn beeches look so much like tombstones. No place for a 'coon to expect to find shelter."

"Guess so," Jim replied vaguely, and Burr jumped against him and whined eagerly.

"Colder'n blazes," I insisted and hastened toward the house.

Old Ragson Tatters from Brushville says: "Amos Tash has a nice sixteen-year old daughter that don't smoke, drink or rate."

COLOMBIA TO PROTECT ITS WILDLIFE

By T. Gilbert Pearson

While working in South America in the interest of wildlife protection, I spent a few weeks studying conditions in the Republic of Colombia. We formed a National Section of the Pan-American Committee for Bird Preservation, and together worked on the form of a proposed law for the protection of birds and mammals. One of the members of this committee, Gonzalez Martinez, was particularly active in securing favorable government action. He has forwarded a copy of the statute resulting from these efforts.

The first national laws to protect wildlife in the Republic of Colombia came into existence through a decree signed on March 7, 1941, by President Eduardo Santos. With the exception of a restriction affecting one species of bird in a small Andean valley, there were no laws whatever on the taking of bird life in that great country where 400 more kinds of birds are found than in Canada and the United States combined.

Briefly, the new decree prohibits hunting, for a period of ten years, certain species, including Upland Plovers, Robins, Woodpeckers, Herons, Thrushes, and Sparrows. Ducks and Geese of all species, heretofore shot at will, are now given a seven months' closed season—April 1 to November 1.

In two of the 'Departments' or States, Dove shooting is permitted for only three months, beginning August 1. Over the entire Republic, Tinamous and shore birds are protected for nine months of the year, hunting being permitted only from November 30 to March 1. Another provision prohibits the sale of such wild birds during the closed season for hunting. Woodcocks may be shot for only four months. Parrots may be killed when such action is necessary to protect gardens and plantations.

Studies will be undertaken to determine the proper periods for protection of mammals in various zones; and a gun license issued without cost is required by all hunters. The shooting of female deer is prohibited at all times. At any time of the year one is permitted to hunt jaguars, pumas, lynxes, armadillos, alligators, and monkeys.

One sentence reads: "A prohibition of five years is hereby prescribed for the killing of ant-eaters and of 'palmeros'—an animal subsisting upon palm-tree growth."

Silver martins are to be protected for five years; and it is prohibitive for professional hunters to shoot game unless they secure a special license, furnished without cost, from a mayor or magistrate having proper jurisdiction.

There is an interesting provision prohibiting the killing of otters, colored monkeys, wolves, water-rats and some othe mammals, until they have attained the length of a certain prescribed number of centimeters.

Local mayors and magistrates are empowered "to organize the forces of vigilance in such form as shall guarantee exact compliance with the prohibitive prescriptions set forth in this decree in respect to hunting." Permits for the taking of birds, mammals and fishes for scientific purposes may be secured upon application from representatives of the Section of Fishing and Hunting of the Ministry of National Economy.

This decree went into effect April 1, 1941.

An agent for the Colombian Government has also recently signed the Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere. This action took place in the office of the Pan-American Union, Washington, D. C.

MYSTERIES OF NIGHT

As I sit on the front porch of my home I can see the day fading and darkness approaching. The sky has grown clear and bright and the stars are coming out one by one.

Suddenly I see a glow in the eastern sky. It looks as if someone has lighted a candle down over the mountain-top. It shines brighter every passing minute until it crosses over the mountains and the whole Heaven is lit up as if a magic hand had planned it all. But only God can do it.

Suddenly a Whip-poor-will begins his song of the evening as he cries Whip-poor-will-whip Whip-poor-will. He pauses for a moment, then begins with a faster tempo. I can hear his cry echoing down the valleys, then re-echoing back from the rocky crags. Then all is silent, but not for long, as he has just moved to a different location. He knows that the whole land waits for his voice. He understands that songbirds of the night are few, and he cheers up those who listen to him.

Next I can hear the dismal croak of the frogs as they begin their serenade of the night down in the marsh. The volume grows louder and louder until nothing but their voices can be heard.

But now the stars have disappeared and the eastern sky has begun to show a sign of fading darkness. Night once more has shown its treasures and day has come again to take its turn at moving the hands around the face of the clock of time.—Herman S. Weilacher, Deputy Game Protector, Brockway, Pa.

COAST BOYS HAVE TO HUNT DEER

Continued from Page 19

Epidemic Hits Herd

A few years ago, some of the California hunters experienced a similar set-up. In the Stanislaus National Forest, the deer herd had been allowed to grow to such proportions that the usual hunting pressure scarcely dented the population. As the herd continued to build up, an epidemic of hoof and mouth disease appeared, and, in short order, was running berserk. In order to save the few deer that had not contracted the malady and to prevent its spread, the California Fish and Game Department stepped in and slaughtered some several thousand head of mule deer. Hunters during the following seasons, and for several seasons thereafter, found pickings mighty slim. Nevertheless, the epidemic was stamped out and the Stanislaus herd saved for posterity.

The 1940 season here in Pennsylvania left the deer herd at the same low ebb in which the Stanislaus killing placed that California herd. The only difference was that you Pennsylvanians had the pleasure both of hunting your deer and eating them, too. The California kill was, of course, inedible.

The point I'm making is that in both instances the deer population was allowed to increase beyond that point where proper management is possible. And, in both instances, the corrective measures were superdrastic. If the 1940 kill in this state had not reduced the herds as it did a similar disease, or the same one, might have played equal havoc here.

At any rate, both states arrived by slightly different routes at the same destination. In California, it was restricted to a small locality; in this state, it is universal.

Build Anew, Now

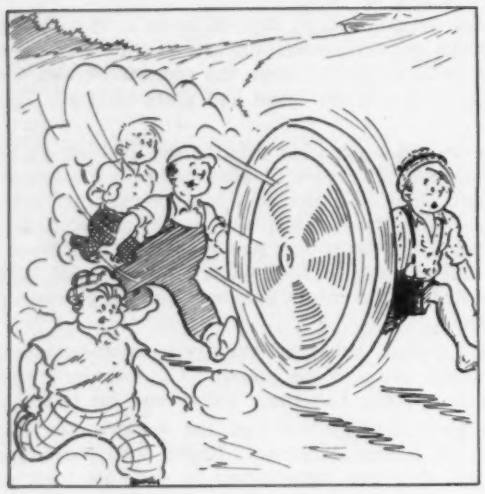
Now that a low ebb in deer population has been reached again, it will be possible to begin anew and, using lessons well learned from past experiences, build up the herd and maintain it at proper levels.

Yes, Johnny, Pacific Coast deer hunting is different from Pennsylvania hunting, yet there are many similarities. In my short stay here, I have learned much of interest and appreciate that Pennsylvania's enviable reputation was acquired only through wholehearted cooperation of sportsmen and the game department.

Emanuel Snyder, 771 Penn Ave., Wilkinsburg, with a prize winner.

CONSERVATION EDUCATION

Continued from Page 18



It gained momentum.

that there is not enough money in the National Treasury and there is not enough money in the States' Treasuries to make 132,000,000 people do what a relatively few say should be done unless the 132,000,000 believe what they are told is right and for their best interest. Public agencies have given the people state parks, forests, refuges, trees to plant on their waste lands, fish to put in their lakes and streams, wildlife to put in their forests and fields, seed with which to plant their gardens, fertilizer to enrich their lands, and have built terraces to check erosion and all at little or no expense to the individual. Yet in entirely too many instances it is just another case of leading the horse to water but you can't make him drink. They have accepted them when free but tolerated them good naturedly rather than believed in them wholeheartedly—lack of education! We must have the wholehearted sympathetic and intelligent support of a majority of the citizens of this country before we can relax and say our conservation programs are established. What can be done about it?

In September 1938 copy of "Connecticut Woodlands," published by the Connecticut Forest and Park Association, the following important statement appears

"There is something that can be done about it, must be done about it, in fact, and that is—put conservation education into public schools. Teach the meaning and necessity of conservation from the beginning. When we have educated a generation to the fact that wildlife management, forestry, and water control in all its aspects are of importance not only to the sportsmen, but to every man, woman and child in the state, then we have accomplished something vital in conservation. This new generation may not know anything about the rights and wrongs and ins and outs of technical conservation practices but it will appreciate the fact that the men who do know these things, and who are doing the work, are doing something which is important to everyone, not only to nature lovers, the farmers and sportsmen, and knowing that there is such a thing as the proper use of the environment, this new generation will give to conservation the public support it so grievously lacks today."

It has become increasingly obvious that a conservation consciousness cannot be obtained wholly by the enforcement of laws and regulations. In nearly every case, States that have developed progressive and sucessful conservation programs have relied more and more upon the eduaction of the public to attain their ends. It seems that conservation education may be achieved in three ways:

(1) Through already existing educational facilities, namely, the schools.

(2) Through extra curricula activities in boys' and girls' clubs and organizations.

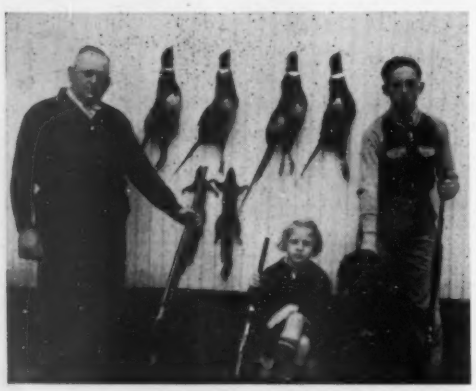
(3) Through extension work among all classes of adults.

It is generally agreed that the soundest and most lasting results can be obtained by giving conservation its proper emphasis in the public schools. There is a definite tendency, and one which I subscribe to, to get away from text books on conservation in the public schools. Where a Department of Conservation has a close working arrangement with their Department of Education, conservation can be intergraded into almost every subject now taught. It works in perfectly with Geography and Natural Science. Interesting themes may be written for the English teacher on phases of conservation, and mathematical problems are just as difficult when composed of soil losses, runoff of water, board feet of timber, mineral equations, expenditures at state parks and increase of game and fish. Some of the better teachers seem to prefer factual materials from conservation departments, and allied agencies, containing data which may be applied to local situations rather than the more general information ordinarily found in text books.

Naturally a conservation education program must include the training of teachers. A survey of many of the college courses being given at the present time reveal that most of them deal with facts alone and do not cover in any way the methods involved in teaching conservation. In other words many conservation courses being given in colleges at present teach conservation rather than teach teachers how to teach conservation.

As conservationists it is not only our job to hand to future generations as good a heritage as possible, but to see that these future citizens have the very best preparation possible to enable them to increase that heritage for each succeeding generation.

Today it is spinning.



Harry and Allen Romberger, Jr., Klingerstown, with pheasants and squirrels bagged in Schuylkill County, November 1.

THE QUIZ BOX

(Continued from Page 21)

Queen Annes Lace, Evening Primrose and many others are passed unnoticed by the casual observer during the winter months. The dead stalks reflect little of their former beauty. But the Goldfinch, that many think has gone south because they miss the familiar gold and black color of the male, finds these foods easily. Don't you ever wonder why the Juncos, Tree Sparrows, Winter Wrens ond others leave their summer homes farther north to peck around those old weeds in the garden? Although it is of prime importance to encourage these "wilderness" areas either by planting or by allowing nature to take over, there are times during the extreme cold and heavy snow of our winter that these native foods must be supplanted by a handout of scratch feed, sunflower seed, peanuts and suet. With the establishment of bird sanctuaries in the parks the numbers of birds have increased in some cases beyond the supply of natural foods and shelter. In the near future we will print a list of native and cultivated plants that will furnish shelter and food to many kinds of birds. Do you know of any plants that are inexpensive, perhaps have pretty flowers, and above all supply fruits that you know birds will eat? Any information on such plants that you have will gladly be accepted and added to the list.—From the Nature Education Staff, Bureau of Parks, Pittsburgh, Pa.

My Fight With A Skunk

By WILLIAM LAMBERSON

Age 13

His tail was slowly rising.

One day, or rather I should say one night, about two weks ago, I had a singular experience. I was sitting in the house about eight o'clock reading a Home Counsel book. Suddenly my little brother rushed in the door.

"Hey Doc," he hollered, "there's something just went under our porch."

"What," I suggested sarcastically, "a bear?"

"No fooling, Bill," he said, "there's something just went under."

I told nim to go out and see what it was.

"Like heck" he said, "I'm not going out there."

"Well," I declared scornfully, "I'll go out and catch the bear, or whatever it is, myself."

I went out armed only with a flash light. My little brother came along to hold the light.

Our porch was only about 18 inches above the ground, so I got down on my hands and knees and crawled under. My brother waited outside. He wasn't afraid any more. I flashed the light around. Heck, I thought, there's nothing in here. Then I saw two round, green, luminous points in a far corner. I'll admit I was scared. I flashed my light again and tried to charge backwards. Then I remembered my sarcastic remark about a bear. O heck, I figured, that's not big enough for a bear, even if there are any around here but I thought it might be a wildcat.

I had heard stories of what a wildcat might do to a person's complexion. The sweat poured over my face. Then I thought of a cat. Sure it was a cat. I was no longer scared. This time I advanced forward to capture the cat.

I hollered to my brother, "Jiminy Crickets, can't you tell a cat when you see one?" He didn't say anything. Now I could see the side of the cat. I threw a stone at him to chase him away. Suddenly he turned around. What I saw made my jaw sag. Sweat again poured over my face. My clothes stuck to me. This was a cat all right, but not the kind I thought it was. It was a species sometimes known as a polecat, but whose common name was just plain skunk. He was mad now because of the stone I had thrown at him. What was far worse was the fact that he was turned away from me and his tail was slowly rising. I retreated as fast as I could but that wasn't fast enough. I had a feeling it was raining. I was blind in one eye and couldn't see out of the other because he seemed to pick on my face. But what was worse was the way I felt. I'd try to describe the smell only it is impossible. If you'd like to know, step on a skunk sometime and you'll know all too soon.

She threw out a towel.

Well, to go back to the story. I fell out from under the porch and staggered to the kitchen. My mother told me gently but firmly that before I got into the house I would first undress. She threw out a towel which I think she wanted me to use as a bath robe. I shed my clothes and wrapped the towel around me where it did the most good. Then Mom let me in to get some clothes, although I still smelled awful.

My father gave me a lecture, the main subject being, "If you want to fight, pick on someone your own size." I silently vowed to obey him in this respect.

Well I got one good thing out of the experience. I didn't have to go to school the next day.

(Continued from Page 15)

week or more services were held here every afternoon and evening. People came from far and near. Some brought their lunch and stayed all day, some even stayed all night, camping out among the trees. Long tables were built, also stands where candy, lemonade and cigars were sold. Everyone had a good time, visited with old acquaintances or made new ones, and were strengthened in their religious life. At other times during the summer this place was used as a picnic park. It is now grown up to small trees and brush.

When you reach the CCC Camp on the Dixie Run road you will know you have passed the site of California. Nothing is now left to tell you exactly where this place was so long ago. Keep straight on up the run. This is a beautiful woodland drive, with many varieties of wild flowers along the way. When you reach the hard surface road of Route 84, go directly across it and on down a dirt road, two miles and you will drop off the mountain into the village of Texas. Here a road to the left across a bridge over Texas Creek would take you up a very steep hill and into Nauvoo. The first R. D. carrier out of Morris once had a very serious accident on this hill. His team of ponies ran away, upsetting the wagon and throwing him out. He was badly injured.

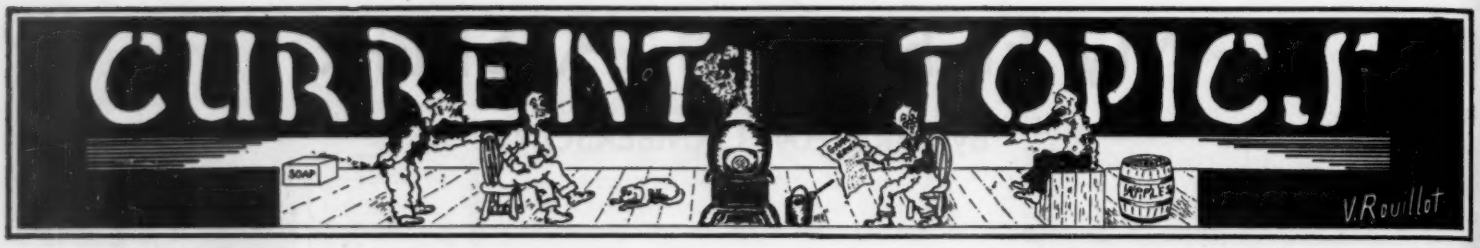
TEXAS

When I told him I drove down this hill last summer and thought it one of the steepest hills I had ever seen, he said, "Did you have any brakes left when you got to the bottom?" Then he said that after he started driving a Ford, he often burned out the brakes on this hill. So do not try to climb out of Texas this way, but keeping to the right, follow along by Texas Creek. Soon you will pass the ruins of a large house. Here, at one time, was located the store and later the post office. This house was also the childhood home of the man who has given me many of the facts in this story. The flat at your right, before reaching this house, is the site of one of the old mill ponds. One of the mills and the hotel were on the left side of the road. Some of the houses in Texas, as you can see, were built high on the mountain side. Directly across the road from the large old house once stood a little home where a girl baby was born. She is now the wife of the man who lived in the large house when he was a small boy

Not far below the old house you will cross the stream and from there on down the valley Texas Creek will be on your right. This is another lovely woodland drive, and especially so in autumn when the leaves have turned to red and gold. No danger now of meeting a panther, but you might see a deer or ruffed grouse. Once there were many trout in the stream. I do not know if any can be caught there now. Along this road you will find a watering trough, and if you carry a drinking cup, you should stop and enjoy a cold, refreshing drink, the water coming from a spring on the mountain side

When reaching the macadam road near the Block House and Texas Club, turn to the right and at the next corner turn again to the right onto Route 84. Come up over the Barrens and back through Morris to Wellsboro. Now you have had a most interesting and beautiful drive, have visited California and Texas, and only been about thirty to thirty-five miles from your home town, if you live in Wellsboro.

Morris, Babb's Creek, Hoytville, Doane, Stony Fork Creek, Pine Creek, Blackwells, Dixie Run, California, Texas, Texas Creek, Little Pine, The Barrens, Oregon Hill—names, interesting names. Names of places and streams that played a prominent part in the days when lumbering was carried on among these rugged but beautiful hills—this "Land of the Endless Mountains."



IN MEMORIAM

HARRY H. GIBB

Again we sadly pay homage to a former co-worker. Harry H. Gibb of Carlisle, Game Protector of Cumberland County from April 6, 1922 until he resigned on June 24, 1935, passed away at his home on December 22. Prior to his service with the Commission he was a Capitol Policeman, for eleven years.

Few men were loved or held in as much esteem by their fellow officers as Harry was, and his character is splendidly exemplified in the following tribute by his pastor, the Rev. F. E. Remaly of the First Evangelical Church, Carlisle, who said in part, "Mr. Gibb was beloved by all who knew him. He was a lover of the great out-of-doors. He was at home in the field of nature. Mr. Gibb was like all the nature lovers I have ever known . . . he was faithful and trustworthy. He had a heart as big as the mountains over which he traveled in other days. The one word in his vocabulary was "others". He literally lived to help other people. He had a brave heart, but he also had a tender heart. He shared his time, his talents, and his money with others. He was always conscientious and honest about his work. Although he was retired from his work for the Pennsylvania Game Commission and spent the last four years of his life as a sick man, he showed a deep interest in wildlife and forestry in this state. The mark of a man is not felt by what he tries to get from other people, but by what he gives to those who stand in need of his services." "Let us think of Mr. Gibb in the words of James Whitcomb Riley's poem, "Away". "Mild and gentle as he was brave, when the sweetest love of his life he gave to simple things; where the violets grew, pure as the eyes were they likened to." The text of the sermon was recorded in Revelation 21:4.

IN MEMORIAM

The untimely death on December 5 of Doris Truckell, an employee of the Division of Propagation and Research, was a great shock to the entire office staff of the Commission. Doris, who entered the service on December 1, 1937, was a most pleasing and efficient co-worker and the Department will miss her greatly.

The courteous person may have numerous faults but many of us will like him anyway. He is at least courteous.—Typo Graphic.

Clipped from somewhere: If scientists are still looking for a "death ray," how about the glaring automobile headlight?—Typo Graphic.

Too Early For Game Kill Tabulations; Estimates Only

It is much too soon to form a definite conclusion on the deer kill. Accurate figures will not be available until after the game-kill reports are returned and tabulated. Nevertheless, preliminary field estimates indicate the take will be between 15 and 18 thousand legal bucks. This would make the season comparable to 1936 when 18,084 deer were killed. However, general observations showed that the deer killed this season were larger, fatter, and carried heavier racks than in previous years.

This year the animals were again hunted in the good old-fashioned hard way, and the hunters who "got back over the first ridge" were usually rewarded. Thinning out of the herd during recent years not only reduced it commensurate with its food supply, but put the remaining animals back in the forests where they belong, thus going a long way toward relieving farm damage and breaking up the dangerous and unsportsmanlike practice of riding slowly along the road, sometimes with **loaded** guns, looking for deer. The "cruisers" were seldom **rewarded** this past season, for the deer were not found in numbers along the highways as in former years.

The kill probably would have been larger had there been a tracking snow, and had not fog and rain covered much of the deer country during the early part of the season, making visibility extremely poor. Increased industrial activities also kept many hunters home, and limited the number of man-hours that many hunters previously spent in pursuing deer.

Some Game Protectors claimed that during the middle of the week "deer hunters were scarcer than deer."

That the herd is teetering on the brink of extermination is ridiculous to even think of for there are enough breeding animals left, that if uncontrolled for a few years they will produce a herd that will be again so large that the Commission's problems will probably be as great as before.

Bear Season Good

While actual figures are not available, indications point to one of the best bear seasons enjoyed by the hutners of the State in recent years. Field men state there was much action in the woods, and most of the hunters contacted reported having seen or started a bear moving, while a goodly number proudly displayed the results of their skill. That there are plenty of bears left for seed stock is borne out by reports of deer hunters who saw bears.

Present indications are that the kill of rabbits, ringneck pheasants, woodchucks and raccoons was higher than in 1940, with other species lower, due in large measure to unfavorable hunting conditions. However, none of the totals will be known until the reports of the hunters, which were finally due January 16, are tabulated.

One important observation made during the season was the great increase in the number of hunters who observed the first rule of safe hunting—**wear bright red!**

H. C. Romberger, Klingerstown, and Solly Bressler, Philadelphia, with day's bag of grouse.

CURRENT TOPICS

COMMISSION ELECTS

Leffler renamed President
Lamberton named Vice-President

At its meeting on January 8 members of the Game Commission reaffirmed their confidence in their Chairman Ross L. Leffler by re-electing him President for the current year. During his two periods of service, this makes the seventh time Mr. Leffler will have served as the head of the Commission, which has progressed rapidly, undertaken many new programs, and planned long-range policies throughout his years of service.

One no less interested in the work, who has headed numerous important committees of the Commission, was elected Vice-President, namely, that very able and congenial member Robert Lamberton, of Franklin.

Castner's Service Lauded

By motion duly offered and seconded, the following resolution was unanimously adopted by the Pennsylvania Game Commission this 8th day of January, 1942, and ordered to be made a matter of record on the Minutes of the Commission:

WHEREAS, throughout the history of the Pennsylvania Game Commission it has been a policy to rotate the office of Vice-President among its members; and

WHEREAS, Samuel C. Castner has served in this capacity during the past year in a most commendable manner; and

WHEREAS, in keeping with Commission policy Commissioner Castner automatically retires as Vice-President at this meeting;

THEREFORE, BE IT RESOLVED, that we, his fellow members of the Commission, express our deep appreciation of the fine unselfish public service he has always rendered during his tenure of office on the Commission, and of his profound judgment and unbiased approach to all of our problems; and

BE IT FURTHER RESOLVED, that we, through this medium extend to Mr. Castner our absolute confidence in his unswerving loyalty, honesty and integriy at all times.

Stolen: White fox hound with black and tan spots, height about 23 inches, weighing approximately 51 pounds and scar under right ear flap. Any information regarding this dog should be forwarded to Paul A. Wakefoose, telephone 92-179 Erie.

Nice 8-point buck killed along Kettle Creek, Clinton County, December 21, 1941, by Harold Hartranft, Temple, Pa.

DO YOU KNOW YOUR BIRDS AND MAMMALS?

By Roger Latham

Sixty-five common names of birds and mammals all found in Pennsylvania. Can you give the proper name?

Scoring: 30—passing
38—fair
46—good
55—excellent

1. Honker
2. Rain crow
2. Piney
4. Greenhead
5. Chink
6. Bull Bat
7. Fish hawk
8. Hedgehog
9. Fish-duck
10. Monkey-faced Owl
11. Reynard
12. Whistler
13. Yellow-hammer
14. Turtle dove
15. Marsh Rabbit
16. Broadbill
17. Cat Owl
18. Hang-nest
19. Quill Pig
20. Bog-sucker
21. Peregrine Falcon
22. Ethiopian Partridge
23. Ring-tail
24. Gobbler
25. Fly-up-the-creek
26. Thunder wings
27. Hun
28. Whistle-pig
29. Red-bird
30. Blue-darter
31. Squealer
32. Polecat
33. Muley
34. Mud-hen
35. Teeter-tail
36. Timber-doodle
37. Button
38. Cock-of-the-woods
39. Thunder-pumper
40. Snowbird
41. Butter-ball
42. Pole Cat
43. Sprig
44. Hell-diver
45. Reedbird
46. Jenny
47. Ermine
48. Chewink
49. Butcher-bird
50. Stake-driver
51. Harrier
52. Summer Duck
53. Bruin
54. Wavey
55. Wild Canary
56. Chalk-line
57. Killy Hawk
58. Spike
59. Crow-duck
60. Birch Partridge
61. Spine-tail
62. Black-head
63. Jack Snipe
64. Hoot Owl
65. Blue-bill

Answers Found on Page 32

FEDERATION MEETS FEBRUARY 13 AND 14

The Pennsylvania Federation of Sportsmen's Clubs will hold its 11th Annual Meeting at Harrisburg on February 13 and 14 this year, marking the first two-day conclave since the organization was formed.

"Doc" M. L. Banker, Chairman of the Planning Committee for the year promises a bang-up program, and invites sportsmen everywhere, whether affiliated with the Federation or not, to attend the meetings. Particularly is this invitation extended for Friday evening at which time a nationally-known speaker will address the assembly, followed by the introduction of prominent guests and a complete performance by a local magician of no mean repute, Howard J. Finney.

Friday morning and afternoon will be devoted to meetnigs of the Resolutions and other Committees.

The regular business meeting will commence Saturday morning at which time also the following heads of the various Conservation Departments will speak on important topics. Ross L. Leffler, President of the Game Commission, who will choose his own subject; C. A. French, Commissioner of Fisheries, who will discuss the work of that department; and G. Albert Stewart, Secretary of the Department of Forests and Waters, who will talk about the proposed large scale cutting program of his department.

In the afternoon resolutions will be voted on and reports from various committees will be heard.

Remember every sportsman is invited to attend all the public meetings.

Stolen: One officer's model Colt, .22 caliber, revolver serial number 22330, near Mars, Pa. Any information regarding the above weapon should be forwarded to Thomas D. Collins, 313 Balph Ave., Bellevue, Pa.

FOX HUNTING NOTES « « By W. NEWBOLD ELY, M. F. H.

MANY hunts who are troubled by deer may be interested in the foxhunting in south New Jersey.

We all seek to have only "real fox dogs", i. e. ones which will run only a fox. We properly condemn any entered hound which ever speaks on a rabbit, a squirrel, or, God forbid, a cur dog. In fact, we believe that many masters are a bit too lenient about "riot". Too many packs go out and music fills the air when there is no line on a fox. The fields seldom know, but the huntsman does or should. Hounds that are not true should have a few thrashings within an inch of their life, and then if they persist should be hung, or drafted to a drag pack with the proviso that they never be bred. Only in this way can the breed be improved. And in our humble opinion foxhounds are far behind beagles as a whole in hunting ability. Coonhounds on account of what they have to do, and the knowledge of their owners, and the fact that these sportsmen are, and have to be, very particular, are also ahead of foxhounds in their proficiency, and we speak from around twenty-five years of hunting the three breeds.

The English being very punctilious in such matters, and with easier facilities for disciplining riot, have developed packs which are remarkably steady on their respective quarries. This is well illustrated, for instance, in the New Forest country in Hampshire. There, within a period of two weeks, we have hunted with the New Forest Foxhounds which would run only fox, the New Forest Beagles which would run only hare, and the New Forest Buckhounds which would run only deer. And all these packs hunted the same identical country.

Now coming back to the foxhunting in southern New Jersey, this section is essentially a deer country. Yet their foxhounds have been so disciplined that they are deer-proof. In fact, there are so many deer that they have to be.

Having foxhounds deer-proof in America is something—we'll all have to admit. It is accomplished by a combination of punishment and culling. Gradually strains are developed which need practically no whipping off deer—they are naturally not interested in this scent.

We have had a few hounds which were like this. When the rest of the pack would start off on a deer they would stand as disgustedly as the good foxhounds we've all seen do when some of the young entry run a rabbit.

But not until we hunted in southern New Jersey did we see a whole pack act in just this way on a deer.

The "modus operandi" of the hunt is somewhat novel and we believe is worthy of a brief account next month.

Work faithfully eight hours a day and don't worry. Then, in time, you may become the boss and work twelve hours a day and do all the worrying.

When you receive a bill the first of the month, you should look on it as a compliment. It is a token that somebody believed in your integrity, and gave you credit.

Heard a man say the other day he is out of debt, which isn't true. Every man, woman and child in the United States is in debt almost $500, whatever that means.

This column favors tanks instead of airplanes for American preparedness. To build up a big air force, pilots would have to be trained, whereas roadhogs would make excellent tank drivers just as they are.

Two bankers were riding down the road. Side by side they sat, both looking worried and both remained silent. Finally, one heaved a deep sigh. The other studied him for a moment and then said: "You are telling me!"

A philosopher says the dangerous period of a man's life commences at sixteen and ends at forty-five. He is wrong. The dangerous age begins when a man learns to talk well enough to be understood and ends at the mortuary.

So often it is the case that the first screw to get loose in a person's head is the one that controls the tongue.

You can always compliment a man by asking the time and then setting your watch to correspond with his.

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DO YOU KNOW YOUR BIRDS AND MAMMALS?

Answers

1. Canada Goose
2. The Cuckoos
3. Red Squirrel
4. Mallard
5. Ringneck Pheasant
6. Nighthawk
7. Osprey
8. Porcupine
9. The mergansers
10. Barn Owl
11. The Fox
12. American Goldeneye
13. Northern Flicker
14. Mourning Dove
15. Muskrat
16. Shoveller
17. Screech Owl
18. Baltimore Oriole
19. Porcupine
20. Woodcock
21. Duck Hawk
22. Crow
23. Raccoon
24. Wild Turkey (male)
25. Little Green Heron
26. Ruffed Grouse
27. Hungarian Partridge
28. Woodchuck
29. Cardinal
30. Sharp-shinned or Cooper's Hawk
31. Young Quail
32. Skunk
33. Antlerless Deer
34. Either the American Coot or Clapper Rail
35. Spotted Sandpiper
36. Woodcock
37. Male Fawn
38. Pileated Woodpecker
39. American Bittern
40. Slate-colored Junco
41. Bufflehead
42. Skunk
43. Pintail
44. Any of the Grebes
45. Bobolink
46. House Wren
47. Weasel
48. Towhee
49. Northern 'Shrike
50. American Bittern
51. Marsh Hawk
52. Wood Duck
53. Bear
54. Either Blue or Snow Geese
55. Goldfinch
56. Little Green Heron
57. Sparrow Hawk
58. A two-point buck deer
59. American Coot
60. Ruffed Grouse
61. Ruddy Duck
62. Scaup
63. Wilson's Snipe
64. Barred Owl
65. Scaup